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**THE IMPACT OF USING SOCIAL NETWORKING SITES ON  
ACADEMIC RELATIONS AND STUDENT LEARNING IN  
UNIVERSITY SETTING**

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**PATIENT RAMBE**

**Thesis Submitted  
for the Degree of Doctor of Philosophy  
to the School of Education  
University of Cape Town  
August 2009**

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Patient Rambe

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ACADEMIC RELATIONS AND STUDENT LEARNING IN  
UNIVERSITY SETTING**

**By**

**PATIENT RAMBE**

**A Thesis submitted in fulfilment of the requirements for the  
degree of**

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**(PHD)**

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**MAIN SUPERVISOR: DR DICK NG'AMBI**

**CO-SUPERVISOR: PROFESSOR CRAIN SOUDIEN**

## LIST OF ABBREVIATIONS

ADP.....	Academic Development Programme
AT.....	Activity Theory
CDA.....	Critical Discourse Analysis
CHAT.....	Cultural Historical Activity Theory
CHED.....	Centre for Higher Education Development
CMD.....	Computer Mediated Discourse
CMC.....	Computer Mediated Communication
CTP.....	Critical Theory of Power
CTT.....	Critical Theory of Technology
DBP.....	Discussion Board Post
DoE.....	Department of Education
DS.....	Disadvantaged students
DSX.....	Disadvantaged Student X
ESL.....	English as Second Language
FAQs.....	Frequently Asked Questions
FGDs .....	Focus Group Discussions
FTF.....	Face-to-face
HBU.....	Historically Black Universities
HEIs.....	Higher Educational Institutions
HWUs.....	Historically White Universities
ICTs.....	Information and Communication Technologies
ID.....	Instructional Discourse
IP.....	Inbox Post
IRC.....	Internet Relay Chats
IS.....	Information Systems
LA.....	Lecturer A
LB.....	Lecturer B
LC.....	Lecturer C
LD.....	Lecturer D
LE.....	Lecturer E
LMSs .....	Learning Management Systems
MCQs .....	Multiple Choice Quizzes
MLEs.....	Mediated Learning Experiences
PASs.....	Previously Advantaged Students
PCs.....	Personal Computers
PDS.....	Previously Disadvantaged Students
SA.....	South Africa
SANTED.....	South African-Norway Tertiary Education Development Programme
SDA.....	Socio-cultural Discourse Analysis
SES.....	Socio-Economic Status

SET.....	Science, Engineering and Technology
SN.....	Social Networking
SNE.....	Social Networking Environments
SNS.....	Social Networking Sites
SQ.....	Student Quality
UCT.....	University of Cape Town
UFH.....	University of Fort Hare
WP.....	Wall Post
WSYWYG.....	What they Say is What You Get
WWW.....	World Wide Web
ZPD.....	Zone of Proximal Development

University of Cape Town

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Finally, to God be the glory, who is faithful enough to watch over me until his purpose has been accomplished.

## Abstract

This study investigates academic relations of educators, tutors, and students in university settings. Academic relations refer to the controlling and productive relations of power that operate at both societal and interpersonal level between academic actors and through them, knowledge is produced and identities are constructed. From a Critical theoretical point of view, power is unequally distributed in society and psychological development is fundamentally mediated by power relations which are socially and historically constituted. Given the capacity of power configurations to influence learning coupled with the fact that such relations are both relational and psychological, the notion of unequal social power is critical to understanding academic relations in university settings.

The psychological and relational aspects of power suggest that underprepared students from disadvantaged academic backgrounds may suffer a sense of powerlessness and social domination as they interact with academics and more capable peers from privileged academic backgrounds. Research suggests that students (especially the previously disadvantaged) form peer-based knowledge sharing clusters (for example, study groups) to augment their intellectual potential and resource limitations. Mindful of these underprepared students' social domination (social and psychological) by high achieving peers and academics, and the capacity of peer-based clusters/ relations to democratise academic relations through presenting opportunities for exchange of perspectives, these peer-based relations present viable proxies for unpacking academic relations.

The problem, therefore, is that while academic relations (lecturer-student, tutor-student, and student-peer) in face-to-face contact are quite central to student meaningful learning and transformation, capturing and studying these relations is complex. This complexity is explicated by the incapacity of traditional classrooms to capture and sustain academic relations due to: 1) The temporality, time and spatially bounded nature of academic relations in class, 2) Class sizes, academics' huge workloads and time constraints that limit one-on-one lecturer-student engagements especially at undergraduate level 3) Transmission pedagogy and classroom space configuration that mute lateral discourses, and 4) Student complex histories and cultural diversity.

Research suggests that student knowledge sharing clusters are shifting from face-to-face to social networking sites (SNS), that is, online social networks that support group collaboration



and support. The persistence of these online interactions, opportunities for peer-based discourses, peer-generation of artefacts on SNS challenge the limitations of traditional classrooms, making SNS essential for unpacking classroom lecturer-student and student-peer relations by proxy (if academics participate). These opportunities, and computer-mediated communication theory's suggestion that computer-mediated nature of textual interaction has potential to undermine status, gender and power asymmetries built in face-to-face interaction inform my thesis that SNS interaction has potential to equalise power relations of academic actors. The goal of this study was therefore, to use lecturer-student, student-peer interaction on SNS as proxies for unpacking academic relations and learning that unfold in traditional academic settings (classrooms, computer laboratories). The research question instigated the impact of lecturer-student, student-peer interaction on the academic /power relations and learning of academics and students in formal university settings.

Using a Critical ethnographic approach, the research investigated power relations and learning manifested in: 1. academics and student text-based messages posted on SNS (Facebook), 2. lecturer and student experiences of using Facebook and its influence on classroom interactions, and 3. Lecturer-student and student peer interactions in class. Mindful of the democratisation potential of computer-mediated communication (CMC) on previously disadvantaged learners, the relational nature of power, the influence of structural forces on mediated interaction and higher mental development, this research was informed by three theories namely, Critical Theory of Technology (CTT), Critical Theories of Power (CTP), and Cultural Historical Activity Theory (CHAT), respectively.

As a participant observer in online ethnography, the researcher employed CTT to examine the democratisation potential and constraints of computer-mediated communication (that is SNS) on learning and academic relations. While CTT was useful for examining the technological effects on mediated learning, the theory was less insightful for unpacking the power contestations in text-mediated discourses. To this end, Critical Discourse Analysis' (CDA) (which draws on CTP) was employed to examine how vertical and horizontal relational power were articulated and contested via textual messages, to complement CTT in its limitations.

Although CTP was insightful for the examination of power manifested in lecturer-student, and peer-based interaction, CTP equally proved inadequate for the examination of mediated learning, that is, the role of artefact-mediated action on psychological development. Mindful

of CHAT's focus on the influence of symbolic mediation on psychological development, CHAT offered a rational complement to CTP for the examination of mediated learning. This was important given that this research on academic/power relations and student learning unfolded in a technology-mediated learning environment (that is SNS). CHAT was adopted as a theoretical and methodological approach to examine how mediated interaction and the interplay of different elements of the lecture activity system impacted on student psychological development and lecturer's teaching practices. In summary, the study examined these empirical materials: text-based interactions (lecturer and student Facebook postings), lecturer and student narratives of lectures and Facebook interactions (interview transcripts, lecturer debriefings after classroom observations), in-class actions and discourses (lecture observations and focus group discussions).

The findings of this study are that SNS democratized academic relations and communication for academically inclined students through: widening the academic networking space, breaching lecturer-student social boundaries that often hindered student access to knowledge resources, and offering 'safe haven' for student contestation of unpopular academic practices. Facebook also allowed shy and timid students to be more assertive in requesting academic support. The unintended effect of SNS was that it reconfigured peer-based relations as high achievers assumed additional vertical, 'super tutor' roles of advising peers. Facebook also regulated in-class interaction by hiving off mundane questions on course administration and practicals from the class. SNS thus augmented classroom interaction as online and classroom learning cross fertilised each other.

The practical contribution of this work is in the insight into how student informal academic and social support online networks could be drawn upon in student in-class learning. The study proposed a 'best practice' pedagogical model/ strategy that draws on: 1) Informal peer-based and lecturer-student knowledge sharing on Facebook and associated SN tools, 2). Student reflexivity on self-generated and peer-generated content, and 3). Self and peer-based evaluation as a basis for academic empowerment. The theoretical contribution lies in the methodology or approach for analysing the interplay between academic relations and student learning using SNS as proxy. In particular, this work contributes a new body of knowledge through the integration of Critical Theories (Critical Theories of Power and Critical Theories of Technology) and CHAT.

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# CHAPTER 1

## Introduction

### **1.1. Introduction**

This study investigates academic relations and learning of educators, tutors, and first year students in a department at the University of Cape Town (UCT). Cummins (1997, p. 423) suggests that academic relations involve “coercive and collaborative relations of power that operate at both the broader societal level (macrointeractions)<sup>1</sup> and the interpersonal level (microinteractions).” Although I examine the interplay of macro and micro relations of power, I am more concerned about micro relations of power of academics, tutors, and students in classroom and online. Micro interactions<sup>2</sup> are “an interpersonal or an interactional space within which the acquisition of knowledge and formation of identity is negotiated. Power is created and shared within this interpersonal space where minds and identities meet” (Ibid, p. 425). Given their interpersonal nature and capacity to influence psychological functioning, micro interactions are insightful for unpacking academic relations and learning in university classrooms than macro interactions. Yet, unravelling these micro interactions (educator-student, and student-peer) in face-to-face (FTF) contact is complex. This complexity owes itself to several factors, namely:

1. Temporal, time and spatially bound nature of classroom academic relations,
2. Huge undergraduate classes and workloads that limit personal level educator-student, and student-peer in-class interactions,
3. Lecture hall space configuration that entrenches one-way transmission of content and inhibit lateral discourses,
4. The limitations of institutional learning management systems (LMS) on peer-based knowledge generation and dialogic interaction,
5. Complex histories and cultural diversity of students involved.

Given the social (interpersonal) nature of micro interactions, and the essence of social interactions for the generation of expansive learning (Vygotsky, 1978; Engestrom, 1987,

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<sup>1</sup> Macrointeractions and microinteractions are presented in Cummins’ (1997) work unhyphenated. I present

<sup>2</sup> I will refer to micro interactions in learning settings as micro level academic relations and those at the macro level as macro level academic relations.

2001; Kozulin, 2003), online social networking presents opportunities for unravelling power relations in academia. Theories of computer mediated communication (CMC) suggest that because communication via computers involves predominantly text messages, the social identity descriptors and non-verbal cues that denote status differences are conceivably absent in this interaction. As Jaffe (1995) suggests, this removal of nonverbal and paraverbal cues which denote social hierarchies (including status, power, seating positions and dress), leads some theorists to suggest that CMC has the potential to “democratise” communication (Short et al., 1976; Kiesler et al., 1984). Consistent with this view and mindful of the capacity of online social networking to trigger meaningful social interaction, my thesis is that social networking sites (SNS) offer a viable proxy for the unravelling of academic relations (micro level interactions) that happen in traditional academic settings (classrooms). This understanding is predicated on the capacity of SNS to:

1. Retain student artefacts (postings) of the information they share and common academic problems they face,
2. Persistence of interaction over time, and anywhere, anytime, accessibility to resources shared (where there is internet connectivity),
3. Informally generate individual and collective personal knowledge,
4. Possibilities they offer academics to trace the history (trails) of interactions as basis for monitoring shifts in student modes of thinking.

In light of the discussion above, I examine three critical issues, which are:

1. How technology-mediated interaction illuminates understanding of shifts in mental structures<sup>3</sup> and power contestations among academic actors manifested in text-based messages (in SNS).
2. Use activity and activity systems to unravel how learning and interactional power unfolds in lectures, and the influence of SNS on classroom learning and student identity formation.

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<sup>3</sup> I define mental structures as the schemas for the organisation of appropriated content. They constitute the epistemic frames or ‘lenses’ with which students conceive knowledge, perceive and interpret the social world around them and use to interpret knowledge. Their shifts result in student changes in their perspectives and cognitive growth. Cognitive development and learning for Vygotsky (1978) essentially depends on the child’s mastery of symbolic mediators, their appropriation and internalisation, in the form of inner psychological tools (Kozulin, 1998).

3. How human actions and discourses provide insights into the power relations and learning in class and the extent to which these discourses draw on SNS interaction.

These three issues necessitate three distinct theoretical approaches and analytical ‘lenses’<sup>4</sup> that I bring into harmony namely, Critical Theory of Technology (CTT)<sup>5</sup>, Cultural Historical Activity Theory (CHAT) and Critical Theories of Power (CTP) respectively. The rationale for merging these theoretical approaches is to draw on their strengths and to complement one another in their limitations. The thrust of this investigation is to explore how social (lecturer-student, student-peer) interaction/relations on SNS (Facebook) illuminate understanding of the power relations and learning nurtured in formal settings (classrooms)

### **1.1.1. Differential power in Historically Advantaged Academic Institutions**

The notion of differential power is critical to understanding academic relations given the often-hierarchical nature of relations between academics and students<sup>6</sup>, and consummate relationship between power, learning and cognitive growth. I contend that power is a psychological construct in as much as it is relational. As such, students who conceive themselves to have diversified learning strategies and coping mechanisms for dealing with learning challenges may subtly assume intellectual dominance over their peers who lack these abilities. For example, Coleman’s (2008) study on African Americans student experiences in a predominantly white, two-year Nursing Programme reveals how their experience of being black students caused them to feel alienated, less privileged, and insignificant, causing them not only to feel different but also to occupy a place of difference. While Coleman’s study did not necessarily involve PDS, it however, points to a close association between disadvantage and powerlessness.

In post apartheid South Africa (S.A.), the changing higher education landscape particularly, the shifts in student racial demographics due to national policy requirements, and broadened access to higher education by previously disadvantaged students (PDS)<sup>7</sup> has activated

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<sup>4</sup> ‘Lenses’ imply the investigative frameworks that provide the analytical and interpretative perspectives which the researcher employs to examine concepts, problems or an issues or phenomena of inquiry.

<sup>5</sup> Although I cite CTT and CTP as separate theories given their huge differences in what they examine – technology-mediated interaction and power respectively, epistemologically speaking, they emerge from one main paradigm, that is Critical Theoretical paradigm.

<sup>6</sup> Even student-peer relations can also be unequal given their varied academic backgrounds and cognitive potential..

<sup>7</sup> I define previous disadvantaged students (PDS) as underprepared learners with underdeveloped learning and ‘psychological functions’ (Vygotsky, 1978) for the effective appropriation of knowledge in university. There is a difference between disadvantaged students (DS) (implies current) and previously disadvantaged (PDS) (historical). However, to avoid confusion of switching between them in this work, I will use them interchangeably as current students also come from historically disadvantaged backgrounds. PDS have



conditions where potentially unequal academic relations between such students and their peers could emerge. As Chaney, Muraskin, Cahalan, and Goodwin (1998) rightly point out:

Disadvantaged students may notice differences from the general student population in such areas as race/ethnicity, academic preparation, income, and culture, so they feel that they do not fit in. They may also be less likely to engage in behaviours that will increase their sense of belonging and that are related to college retention; for example, attending full time and interacting frequently with students, faculty, and staff (p. 198).

This resounds my argument about PDS' sense of loss of power and possible marginalisation that may contribute to their alienation and disengagement. Students from disadvantaged academic backgrounds (PDBs) who enrol into historically white universities (HWUs),<sup>8</sup> where they interact with academics and peers from elite backgrounds may feel less confident and withdrawn due to their limited learning strategies and under-preparedness for self-directed learning.

The alienation and powerlessness of PDS could be attributed to limited capability to engage with their historically privileged peers, perceived lack of belonging, and lack of adequate integration into these elite learning environments. UCT Health Sciences Faculty report on race reports that black students were under pressure to perform: "they constantly have to prove themselves worthy" "to disprove white staff and students' stereotypical perceptions of black students," "they are expected to lose parts of their identities in order to fit into a white world," and "they are expected to be extraordinary in order to be recognised" (Erasmus & de Wet, 2003, p. 38). This institutional culture of assimilation could work to undermine the self-esteem and self-worth of some PDS.<sup>9</sup> In spite of UCT's commitment to offer meaningful learning experiences to all students, these general feelings persist among underprivileged university entrants.

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insufficiently developed or inefficient use of cognitive functions that serve as requisites for effective thinking and learning (Feuerstein et al., 1990). These include limited technology competence, English language proficiency (the language of discourse at UCT), communicative competencies, and cognitive resources for dealing with complex problem solving. At UCT, these students are self-categorised by attending an extended programme- Academic Development Programme (ADP)

<sup>8</sup>Universities were generally categorised into HWUs and historically black universities (HBUs) at the height of apartheid. The former served a privileged predominantly white and few indian students and these universities were well supported by the Apartheid regime in terms of qualified academic staff, educational and financial resources. HBUs were under resourced universities that served predominantly black and coloured communities and heavily depended on national government for financial support. Although the post independent S.A. government merged many of these HWUs and HBUs to effect transformation processes and rationalise resources, structural disparities in terms of resource base still exist.

<sup>9</sup> Because most blacks are previously disadvantaged, the term PDS has been used synonymously with blacks, though this does not mean that all blacks are disadvantaged.

## **1.2. Problem background**

In this section, I provide a discussion on the influence of broad societal factors on academic relations and learning in tertiary settings so that the problem of unbalanced academic relations at HWUs is comprehended. These factors are Apartheid legacy, South Africa's diverse languages, digital divide, and challenges of the retention of black students in universities.

### **1.2.1. The Apartheid legacy**

The incorporation of students from previously disadvantaged backgrounds into privileged HWUs has put pressure on these universities to conceptualise ways of ensuring their academic inclusion and social integration. Although staff recruitments and student enrolments in HWUs have shifted significantly,<sup>10</sup> the elite institutional culture in which instruction unfolds remains perceivably repulsive for many Black<sup>11</sup> students. Badat contends that equity of opportunity and outcomes at HWUs is still being compromised to various degrees by institutional culture:

The specific histories of these institutions, lingering racist and sexist conduct, privileges associated with class, English as the language of tuition and administration, the overwhelming predominance of white academics and administrators and male academics, the concomitant under-representation of black and women academics and role-models, and limited respect for and appreciation of diversity and difference could all combine to reproduce institutional cultures that are experienced by black, women, and working class and rural poor students as discomforting, alienating, exclusionary and disempowering ( Badat, 2008, p. 18).

The fact that the majority of experienced staff at UCT is still White, coupled with the limited visibility of black staff could disorient and 'exclude' PDS who enrol at this university. Greater forms of academic and racial cohesion are thus further compromised by the persistence of these perceivably class and race based relations of dominance. These perceptions of alienation and disadvantage harboured among PDS activate unbalanced academic relations as they disorient underprepared learners from productive academic discourses.

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<sup>10</sup> HWUs are increasingly shifting the demographics of their student and staff bodies by enrolling qualified blacks from formerly disadvantaged backgrounds and by recruiting qualified staff from previously disadvantaged races, respectively.

<sup>11</sup> Black is a collective term for all non-whites namely, black africans, coloured, and indians (people with Asian origin). In this work, however, black students mean black africans and coloureds from underprivileged backgrounds that UCT categorises as 'previously disadvantaged.'

### 1.2.2. South Africa's diverse languages

Studies on student college retention, student progression in courses and increasing throughput have targeted improving second English speakers' language acquisition, accessing additional academic support needed through Academic Development Programmes (ADP)<sup>12</sup> and providing interventions to reduce dropouts in Science, Engineering and Technology (SET) and Commerce faculties at former White English-speaking higher educational institutions (HEIs) (Nash, 2006; Burch, Sikakana, Yeld, Seggie & Schmidt, 2007). However, these aforementioned studies have not examined the relationship between academic relations and meaningful student learning. A comprehensive understanding of students' quality of academic life and extent of immersion in courses would necessitate a deeper understanding of academic relations between staff, students, and peers.

S.A. has 11 constitutionally recognised languages of instruction although English is the imposed language of discourse in many schools. Student access to English as a medium of instruction and discourse in schools is a challenge given some black teachers' limited mastery of the language. Utna and Halmardottier (2004) observe that the complexity of English as a mediation language has forced many S.A. teachers to either teach completely in Xhosa or Afrikaans or resort to "code switching" or "code mixing"<sup>13</sup> in their class contacts. The code switching is usually from vernacular to English so that non-English learners can understand. Yet, Howie and Scherman (2008) suggest that code switching can also reduce the exposure of the official medium of instruction to the pupils [and students] to the point that they never become proficient in it and hence may perform poorly in assessments in that language. I infer that this limited exposure to English by second language learners becomes a source of academic disempowerment in HWUs where content delivery is in this medium. In addition, these universities expect students to scholarly engage in English.

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<sup>12</sup> UCT's ADP function is to develop and run programmes and courses designed to foster the access, retention and success of students from disadvantaged educational backgrounds (CHED, 2009). ADP offers services like (1) the "extended curriculum" model in which substantial foundational provision is articulated with the mainstream curriculum, resulting in a lengthened degree programme that allows PDS to develop firm academic foundations (Ibid) (2) The Writing Centre that offers on demand, English language instruction and skills for second English language learners.

<sup>13</sup> Saville-Troike (1982) refers to code switching as the change in language that takes place between sentences, also called *inter-sentential change*. Code mixing, instead is a change in language that takes place within a sentence also called *intra-sentential change* (as cited in Utna & Halmardottier, 2004, p. 8)

### **1.2.3. The digital divide**

#### **1.2.3.1. Provincial disparities in terms of ICT access**

The digital divide in S.A. takes different forms like provincial differences in terms of access to ICTs, rural-urban divide, racial divide, gender divide, and differences in ICT uptake by age. Provincial disparities are prevalent in S.A. with regards access to information and communication technologies (ICTs) as there is still a high concentration of personal computers (PCs) and the Internet in the Western Cape (Czerniewicz, 2007). For example, in 2007, Western Cape Province had 46.7%, 33.8%, and 23.4% in terms of percentage households with cell phones, households with access to PCs, and households with internet connectivity, respectively (Tlabela, Roodt, Paterson & Weir-Smith, 2007). In comparison, Limpopo province had 26.1%, 4.4%, and 3.0% respectively for the aforementioned variables.

In light of the above disparities, students coming from the underserved areas are at a great disadvantage as huge chunks of educational content migrate from face-to-face delivery to virtual networks in universities. These disparities may become the seedbed of unequal academic relations as under-privileged students over rely on their lecturers as main sources of information.

#### **1.2.4. Challenge of black student retention**

The momentous challenges in higher educational institutions (HEIs) of ensuring students' (especially PDS) retention in college, fostering their academic progression in courses, and increasing their throughput have been widely acknowledged in South Africa (Lehmann, Andrews & Sanders, 2000; Moja & Hayward, 2005; South African-Norway Tertiary Education Development Programme (SANTED (II), 2006). The throughput of black students from underprivileged backgrounds who enter predominantly white universities has remained a millstone around the necks of universities. South African Department of Education (DoE) has targeted increasing the participation rate of black students in higher education from 15% to 20% (an additional 200 000 students) over the next 10 to 15 years; while also increasing graduation rates from 15% to 30% of enrolled students per annum (Department of Education [DoE], 2002). For example, black students generally take longer than their white counterparts do to complete the undergraduate degrees (Nash, 2003). To compound this, Czerniewicz (2004) notes the high failure rate at UCT in the Science, Engineering and Technology (SET) and high dropouts from university (a campus based student in every 6 dropping each year) as a matter of serious concern.

Though the aforementioned studies (Nash, 2003; Czerniewicz, 2004) do not necessarily characterise dropouts by race, UCT's Institutional Planning Department (IPD) however, has empirical evidence pointing to blacks as the most vulnerable group in HWU with a higher propensity to fail to graduate or to drop out than other groups. For example, performance of the 2001 UCT Cohort (2001-2005) shows that Black Africans had the highest total dropout rate of 39% that is, 18%, 25%, 32%, 36%, and 39%, respectively. In comparison, whites had a total dropout rate of 19%, that is, 10%, 14%, 16%, 18%, 19%, respectively, for the same period (UCT Institutional Planning Department, 2005). This institutional data and the aforementioned Nash (2003), and Czerniewicz (2004), studies however have not targeted the relationship between academic retention and academic relations. If academic relations have to do with meaningful learning experiences that guarantee student academic achievement and progression in their courses, they are worthy of study to ensure student retention and academic and social integration in college.

### **1.3. Problem statement**

The capacity of social interaction (both face-to-face [FTF] and mediated) to foster meaningful learning experiences and development of higher psychological functions has been widely acknowledged by researchers (Vygotsky, 1978, 1998; Engestrom, 1987; Kozulin, 2003). For Vygotsky (1998), the origin of the child's [/learner's] consciousness is linked to its social relations with the environment. He notes that "the social situation of development represents the initial moment for all dynamic changes that occur in development during the given period" (Vygotsky, 1998, p. 198). As such, human consciousness emerges from human interaction with the social environment, and is mediated by symbols or interactions with other humans. Academic relations are therefore, mediated through language and discursive practices that trigger higher psychological functions.<sup>14</sup> On SNS, text-based discourses mediate human interactions, and potentially trigger the realisation of higher mental functions. To this end, SNS textual artefacts are symbolic mediators of psychological functioning.

In the context of this study, social interaction on SNS would mean student social survival networks and discursive practices that generate explorative inquiry, reflexive thinking, and in-depth understanding of theoretical and practical issues of the discipline/subject. Academic relations in this sense are about interactive power relations manifested and negotiated by academic agents (lecturers, tutors, students) as they engage in matters of academic interest.

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<sup>14</sup> Higher psychological functions include perception, voluntary memory, speech, and thinking (Vygotsky, 1998)

The crux of the matter is that while the importance of SNS for informal learning and democratic access to knowledge and information has been acknowledged, its (SNS) impact on academic relations remains unknown or marginally comprehended. The problem, therefore, is that while academic relations (lecturer-student, tutor-student, and student-peer) in face-to-face contact are quite critical to student ‘deep forms of learning’ (Marton & Saljo, 1976; Thomas & Bain, 1984) and student academic progression in their courses, capturing and studying these relations is very complex. This complexity is activated by inter alia, the following:

### **1.3.1. Temporality, time and spatially bounded nature of academic relations**

Face-to-face interactions between educators and students in class and laboratories are temporal, time dependent and spatially bound. Despite this temporality of lecturer-student interaction in lectures, “learners often encounter problems that may need immediate attention or are time-driven; and generally they feel the lack of context-sensitive and anywhere, anytime academic support as they traverse various learning locations” (Kekwaletswe, 2007, p. 102). I infer from his argument that the limited points of lecturer-student contact inside and outside the class complicate: 1) student timeous access to academic support in problem solving, 2) lecturer’s knowledge of student problem areas, 3) an in-depth understanding of academic relations that positively impact learning.

To further compound this temporality, tracing the cognitive development of students through examination of lecturer-student interaction in class is difficult. This is because in spite of its mediation through social interaction, learning is also an internal mental activity. Due to the acquisition models of learning adopted in many S.A. universities, the minimal role of the knowledge acquirers (students) in the knowledge production process in class, and the absence of student artefacts/writings (on what they have learned) to formatively assess their academic progress, prediction of student learning trajectory is complicated. As Ng’ambi (2004) reiterates, information sharing is a product of mental structures and produces mental structures, and the relationship between these two suggests that artefacts of information sharing may provide [educator] access to [student] mental structures. With the dominance of summative university assessments (tests, assignments) however, it is hard for academics to track and monitor student’ traces of minds and voices (their learning challenges, conceptions of learning, transformation of thought processes) during problem solving.

### **1.3.2. Class sizes, huge workloads and time constraints**

Massification of higher education has resulted in huge classes across university departments as more previously disadvantaged students access tertiary education. One-on-one lecturer-student engagement (in class or during consultation times) is constrained by class sizes, heavy administrative responsibilities of lecturers and time constraints. As Kekwaletswe (2007) posits, in universities, limited support is normally only available at fixed times (i.e., during instructor office hours) or seminar slots, and the opportunity for engagement in large lecture theatres is limited, if not almost impossible. Studying lecturer-student relations in light of these constraints becomes extremely difficult. In addition, it is a challenge to sufficiently capture and preserve the traces of educator-student interactions and academic perspectives developed in class for future reference by students due to the fast lecture pace and logistical constraints. Although podcasting lectures could be a viable alternative to these challenges, academics seem to have reservations about their use, as they fear they could negatively affect lecture attendance.

### **1.3.3. Environmental constraints**

Configuration of lecture space that reinforces one-way transmission of content complicates examination of social interaction that gives rise to academic relations. Monahan (2002) employs the term ‘built pedagogy’ to signify that configurations of lecture space afford as well as constrain certain teaching and learning activities. Often cited examples are the lecture hall seats that face the front and the front centre position of the podium that signal a transmission approach to learning and reinforce the view of a ‘sage on the stage.’ The arrangement of seats in rows also potentially mutes peer-based collaborative interactions.

Though universities offer learning management systems (LMS), their use is often limited to student content acquisition and fails to extend learning beyond institutionally defined boundaries. The limitations of institutional LMS manifest in increase in student created LMS in tertiary learning settings. Artwell (2007, p. 9) argues that LMS were designed like “walled gardens” to perpetuate the isolation of the school from the wider outside community. He elaborates that the major implementation of education technology has not been to encourage social networking and creativity but to manage learning and isolate networks. I contend that social networking sites (SNS) like Facebook, provide an ideal opportunity for students to informally network and collaborate in ways that LMS fail or least afford to do. I will elaborate on this in Sections 1.3.6.3 and 1.3.6.4.

### **1.3.4. Rationale: Emergence of the problem**

The complexity of studying academic relations manifests in several forms:

#### **1.3.4.1. Insufficient academic training**

Although most lecturers at UCT are highly experienced, they were insufficiently trained to support under-prepared students coming from disadvantaged academic backgrounds. As Nash (2006) observes, new teaching strategies are necessary if the simultaneous objectives of increasing the number of educationally disadvantaged students admitted to universities, and raising throughput and graduation rates, are to be attained. Academic relations become hard to unpack given lecturers' limited understanding of academically-at-risk students' learning needs, learning styles and capabilities. The University of Fort Hare (UFH)-SANTED II Annual Progress Report (2006) submits that academic staff at this university lack practical skills and coherent strategies in assisting students who struggle to adapt to tertiary studies; and lack data about the reasons for dropouts and failure. This is due to insufficient research in this area and because UFH has insufficiently developed tracking systems to inform strategy and identify academically-at-risk students (Ibid). If student failure and dropouts are attributable to lack of learning, then these challenges necessitate new insights on academic relations (lecturer-student, student-peer) to solve them and to generate enriched student learning experiences.

#### **1.3.4.2. Cases of high attrition rates despite pervasive academic interventions**

Nationally, universities' momentous challenge over the years has been to significantly reduce their student dropout rates and scale up throughput. The National Assembly Internal Question Paper's (No. 22 2006), statistics of the 2001 cohort (2001-2004) of first-time undergraduates of all the 21 S.A. universities categorises students' dropouts, throughput, and retention, and reports interesting results. Two pertinent issues are apparent in these statistics:

- The highest numbers of dropouts for the majority of the universities were experienced in the students' first year of study, with some as high as 27%.
- Only five universities had a throughput of 50% and beyond suggesting that many universities struggled to cope with student retention and progression in courses.

This justifies the need to study academic relations to ascertain the kind of learning relations and experiences that contribute to increased throughput.



#### **1.3.4.3. Dominance of instructivist pedagogies**

Instructivism involves “didactic process of transmitting knowledge” and emphasises that “the teacher is responsible for ensuring that learning takes place” (Kember, 2001, p. 215). While teacher dominated instructivist pedagogical style is critical to the organisation of knowledge in forms that be appropriated by students, its limitations are that with large classes, it often degenerates into authoritarian pedagogical style. This teacher dominated mode undermines student creativity and assumption of full responsibility for their learning. With the increasing appropriation of SNS by students and opening up of opportunities for student acquisition of network-based literacies, students may find instructivist styles disempowering.

#### **1.3.5. Social practice of social networking**

##### **1.3.5.1. Traditional forms of social networking**

In my problem statement section, I indicated the difficulties of unravelling academic relations in face-to-face contacts because of: 1) limited traces of the minds of students (during lectures and problem solving), 2) unavailability of student artefacts/written texts during their academic interaction, and 3) limited opportunities for peer-based interaction in instructivist classes. Yet, student informal social and academic networks present an ideal opportunity for unpacking academic relations, as I will explain in Section 1.3.6.

Traditionally, student used peer-based networks (face-to-face) to share information informally and common academic problems (for example, study groups). These groups constituted strategic self-survival networks for coping with academic challenges, psychosocial support, and consolidating collective intellectual abilities. However, in the recent years there has been an increasing shift in student-peer interaction (face-to-face) towards online informal social networks. These online networks present opportunities for developing an in-depth understanding of the problem of face-to-face academic relations by proxy owing to their capacity to:

- 1) Retain student artefacts that are based on the information they share and common academic problems they face,
- 2) Informally generate collective and individual personal knowledge,

- 3) Offer academics the possibility to trace the history (trails) of interactions as basis for monitoring shifts in student modes of thinking. I elaborate on these issues in Section 1.3.6.

#### **1.3.5.2. Online social networking**

Social networking sites (SNS) constitute web spaces where individuals (learners) can personalise their online profiles, upload pictures, posts, music, photos of themselves and social circles as well as interact via writing and commenting on others' posts and profiles in chats and walls (Shade, 2007). The purpose of SNS is 'relationships' and 'sharing' hence networking, which makes them useful for unravelling academic relations. What seems problematic however, is unpacking the nature of relationships, and types of learning in SNS and how these mirror real classroom academic relations. This is the prime focus of my study.

Flynn (2008) reports that companies like InsideView and Genius seek to integrate broad Internet searching with social networking and business intelligence software to give workers access to interrelated pools of information. HEIs should infer from these new behaviours that online social networking is become an entrenched social practice that can substantially benefit networked learning and enhance academic relations. Because SNS are essentially about meaningful social interaction, itself the heartbeat of academic relations, unravelling SNS interaction provides an opportunity for an in-depth grasping of how academic relations in traditional settings work.

#### **1.3.5.3. The Facebook phenomenon**

In 2004, Mark Zuckerberg, a Harvard university student, developed Facebook. Charnigo and Barnett-Ellis (2007) highlight that although originally created to allow students to search for other students at colleges and universities; the site has expanded to allow individuals to connect in high schools, companies, and within regions. In infer that this SNS allows students to create their own informal network of friends with whom they share resources (academic and social), 'friendship' connections, personal activities, and social practices. To the extent that Facebook allows networked connectivity and social interaction among students in a space they perceive as 'student controlled,' it renders itself capable of disrupting hierarchical forms of academic relations characteristic of traditional classrooms.

### **1.3.6. The relevance of SNS for understanding academic relations**

Because academic relations and learning in traditional classroom settings are hard to unpack, it is difficult to identify learners' needs and learning challenges as basis for improving pedagogical practice. Yet as SNS interaction among students becomes more prevalent, and many university entrants interacting on SNS (Facebook) upon their enrolment into university, SNS therefore, constitute a vantage point for unpacking academic relations (in traditional face-to-face contract) and student learning for several reasons:

#### **1.3.6.1. Social Networking Sites usage –An embedded social practice for youths**

SNS are popular, 'cool' sites<sup>15</sup> where many university students hang most of their times. A national survey of randomly sampled of 935 youths aged 12 to 17 demonstrated the surging popularity of these sites among American teenagers:

- 55% had used SNS like MySpace and Facebook,
- 48% visited social networking websites daily or more often, and
- 55% of online teens had created a person profile (Lenhart & Madden, 2007).

I infer that students (especially PDS) tend to form social networking (SN) clusters as social survival networks and to reclaim their perceived loss of social power to their privileged, high achieving peers in face-to-face contacts and alienation by dominating academics. As Otto and Featherman (1975, p. 702) suggests, "Alienation is a consequence of inadequate socialization which is precipitated by social and psychological conditions which either facilitate or impair individual learning." I infer that alienation can breed psychological inferiority. Thus peer-based social networking constitutes student attempts to form self-controlled knowledge communities to overcome this academic and social alienation.

#### **1.3.6.2. The unique properties of online social networking**

Online social networking presents unique opportunities for learning, and tracking student activities that classrooms interaction fails to offer. For example, once posted on Facebook, text messages (postings) have a relative permanence that allows interactants to track the chatting history of their peers allowing them to position their minds against those of others. In addition, the context-free nature of such interactions (where there is internet connectivity or networked mobile devices), and social presence awareness of interactants on Facebook

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<sup>15</sup> 'Cool' sites are websites which internet savvy teenagers or young learners conceive as desirable and frequent for the services they provide.

challenge the spatially bounded nature of classroom interaction. Students do not necessarily have to be in class to access learning resources and to interact with peers/lecturers. The conversational nature of SNS public spaces allows students to learn to express themselves in a ‘safe’ informal environment and to hone their critical thinking skills in discourse.

#### **1.3.6.3. The changing calibre of students enrolling into university**

The new breed of learners coming into university have learning needs and learning styles that are different from the past cohorts, though they are taught by an older generation who learned and were trained differently. As Oblinger and Oblinger (2005) argue, emerging from an age of media saturation and convenient access to digital technology, these learners have distinct ways of thinking, communicating and learning. The aforementioned research by Lenhart and Madden (2007) demonstrates the generational differences in uptake of SNS:

- 55% of online teens versus 20% of online adults have created a profile on a SNS like MySpace or Facebook.
- 33% of college students versus 12% of online adults have created their own online journal or blog.
- 15% of young adults versus 8% of adult internet users have up-loaded video to the web.

The above statistics demonstrates the young generation’s immersion in SNS as well as the limited involvement of the older people in these sites. These statistics resonate with Prensky’s (2006) view that the current generation of university learners are ‘digital natives’ because of their huge exposure of media and digital technologies. Although, many of these students are technophiles, the support of the lecturer on these sites is critical given that access to technology does not necessarily guarantee proficiency. The underutilisation of Vula’s<sup>16</sup> interactive tools and the concomitant surging use of Facebook by UCT students (Bosch, 2009) suggests the importance attached to personalised networking spaces by learners.

#### **1.3.6.4. Evidence of informal learning in SNS**

With over 98 percent of students at UCT having cell phones and anecdotal evidence showing that texting is their *modus operandi* of communication (Centre for Education Technology,

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<sup>16</sup> Vula is UCT’s version of Sakai-based learning management system (LMS). It hosts all departments’ student learning materials (lecture notes, recommended readings), course management tools, and interactive tools (discussion forums, chat rooms)

2009);<sup>17</sup> it can be argued that students could be communicating messages and resources of essence to their informal learning. The fact SNS (Facebook, blogs) are now also accessible via mobile phones, is reassuring for academics that are eager to extend student learning beyond formal settings of the classrooms using such technology. As Bishop-Russell et al. (2006) reiterate, Facebook.com's online community meets the requirements set forth by Chickering and Reisser (1993) for an environment that promotes student development by providing regular interaction between students, opportunities for collaboration with people from diverse backgrounds, and serves as a social reference group. Given this academic potential, Facebook presents as a vantage point for unravelling academic relations, if academics support is rendered

#### ***1.3.6.5. Shifting notions of what constitutes learning spaces***

While lectures are still the traditional form of lecturer-student contact, it seems the bulk of the peer-based interaction that activates learning now happens through SNS where students expend their university life. The conception of learning space is shifting from physical location towards virtual networks. This owes itself to SNS' convenience and the lack of additional demands on interactants to meet facially. Riva and Galimberti (1998) contend that where residence halls, student unions, and classrooms once thrived as the centres of collegiate community, virtual reality has diminished the necessity of these geographic locations for community formation (cited in Bishop-Russell, Dubord, Hansen & Webster, 2006). Identifying with Riva and Galimberti (1998) I suggest that Facebook provides a 'cool and safe' environment for student engagement in communities of practice in ways that LMS least afford to do. Examples include, collaborative networking (beyond the institution), and information sharing through friendship networks.

### ***1.4. Research objectives***

In light of Facebook's surging popularity among university students for their informal networking and knowledge sharing, Facebook presents an opportunity to unravel the problem of academic relations and learning, particularly if academics support students on this space. I therefore, seek to understand the academic relations and learning nurtured in traditional classrooms (lectures, laboratories) by using SNS interaction as a proxy. I contend that understanding these SNS interactions can help develop new understanding about academic relations in classrooms for several reasons: 1) students normally have a heavy presence on

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<sup>17</sup> <http://www.cet.uct.ac.za/projects#MobileLearning>

Facebook, 2) it allows for both individual and collective knowledge construction and reflexivity in peer-based learning communities.

My study also strives to gain new insights into the problem of lecturer-student and student-peer interaction through understanding how students help one another learn using SNS. The argument is that if academic relations in face-to-face contacts are highly complex to understand given the limited lecturer-student interaction, Facebook interaction can be a 'window' from which inferences about these relations can be made. Studies on CMC report that academic staff perceives student use of SNS to be subversive, especially anonymous CMC where personal identity is in some cases unknown, and in many other cases uncertain or unverifiable (Postmes & Spears, 2002). Sometimes, CMC is heralded for its power to break down social boundaries and to liberate individuals from social influence, group pressure, and status and power differentials that characterise face-to-face interaction (Postmes, Spears & Lea, 1998). Although SNS involve interactions where the interlocutors' identities are known or potentially recognisable, the capacity of such sites to foster peer-based interaction among knowledgeable students may potentially subverts hierarchical power and influence as multiple sources of information emerge. My study therefore, unravels how SNS subverts power relations and its subsequent effect on lecturer-student and student-peer interaction.

Given the evidence of students informally interacting among themselves in SNS, it is important to examine ways in which academics could scaffold students using SNS. Students are being prejudiced of access to expert support and knowledge in SNS by the non-participation of academics on SNS. Additionally, my study seeks to explore a 'best practice' pedagogical model of SNS interaction that serves as an intervention to support students, especially PDS.

## ***1.5. Research Questions***

### **Primary questions**

In light of the above objectives the research questions are:

1.5.1. How does social (lecturer-student, student-peer) interaction on SNS (Facebook) illuminate understanding of the academic relations<sup>18</sup> and learning nurtured in formal settings (classrooms)?

1.5.2. How do peer-based academic support structures using SNS provide insights into the problem of lecturer-student relation?

### **Secondary Questions**

1.5.3. In what ways do SNS subvert power relations and what are its subsequent effects on lecturer-student and student-peer interaction?

1.5.4. In what ways can SNS be used to scaffold<sup>19</sup> student learning in university?

1.5.5. What pedagogical models can optimally support student meaningful learning in SNS?

1.5.6. What different student identities emerge from their academic (peer-based and lecturer-student) interaction on Facebook?

1.5.7. How are students' epistemic frames shifted by lecturer-student and student-peer interaction on SNS?

1.5.8. What other contextual, meso and macro factors influence lecturer-student and student-peer interactions in face-to-face academic contact?

## **1.6. Significance of the Study**

Studying academic relations is critical to establishing democratised academic relations that can lead to supportive learning environments that are more inclusive. Creating supportive learning environments that are more inclusive and offer equitable learning outcomes, have been acknowledged in literature as important (Gutierrez & Larson, 2007; Pettenati & Cigognini, 2007). However, this understanding presupposes balanced academic relations between academic interactants. Levelling the relations of power between academic actors and

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<sup>18</sup>I have already argued that academic relations are relations of power, so I mean power relations.

<sup>19</sup> Scaffolding is a term coined by Wood, Bruner, and Ross (1976) to explain assistance rendered by a more knowledgeable/ experienced/adult to the novice/child in task performance. The support could involve a range of tools from leading questions, elaborations, to technological tools and human tools. In my study, scaffolding implies appropriation and internalisation psychological mediators like language, questions, rule of engagement that leads to meaningful learning and changes in mental schemas that trigger growth.

enhancing learning necessitate the embracing of personalised access to academic resources, collaborative knowledge production, progressively bestowing students the responsibility for learning and enhancing their developmental capacity.

Secondly, an expansive view of development would embrace empowering students to broaden their repertoire of skills and capabilities for knowledge production, reflexivity, and reasoning and these skills are useful for learning in face-to-face contacts. To promote transformation based learning, Gutierrez (1995) proposes the concept of the ‘Third space’- where the teacher and students scripts –the formal and informal, the official and unofficial spaces of the learning environment intersect, creating the potential for authentic interaction and a shift in the social organisation of learning and what counts as knowledge. Facebook, with its focus on both collective and individual knowledge production in a quasi-formal ‘student controlled’ environment can safely constitute students’ Third space. Facebook could allow for the democratisation of vertical academic relations through unlocking lateral forms of reflective discourse among students, widening learners’ consultation base beyond their classmates, and increasing student responsibility for knowledge construction.

Thirdly, the contemporary focus on indigenous knowledge systems and the value of tacit knowledge has put more significance on common knowledge socio-historically and culturally generated for student learning and student empowerment. SNS afford free expression of common knowledge and student ‘spontaneous concepts’ (Vygotsky, 1978) in ways that classroom practice fails to sufficiently do. This failure could be due to limited contact time, and limited opportunities for peer-based interaction in task execution. SNS interaction’s support for peer-based dialogue and text-based conversations permit the conversion of collectively generated personal practical knowledge (Clandinin, 1986) into pedagogical content knowledge (Shulman, 1986) which is applicable across different contexts.

Additionally, tracking how students’ epistemic frames are manifested in virtual interactions could be useful for educators interested in assessing students learning needs, identifying students’ areas of difficulty with a view to providing systemic interventions. By attending everyday learning across a range of contexts, with one eye focused on the collective and the other on individual sense-making activity, we can notice new forms of activity, stimulated by unresolved tensions and dilemmas, that can lead to rich cycles of learning (Gutierrez, 2008), what Engestrom (1987) calls ‘expansive’ learning.



### **1.7. Conceptual model of academic relations in SNS**

My view is that because academic relations are relations of power that happen in the conceptual realm (abstract) which is hard to unpack, understanding what happens at practical (relational level) in SNS could give good leads on the academic relations and learning that happen at the conceptual realm. I therefore, engage with the operational levels and examine how they mirror the bigger picture on academic relations.

At the practical level, I have noted the opportunities that SNS provide relative to the broader macro environment of S.A. higher education:

- SNS offer opportunities for students to realise freedom of expression of their ideas and personal knowledge through text-based interaction with peers. In view of S.A.'s post-apartheid legacy that supports open, critical dialogue by all social groups including marginalised racial groups, SNS enable the expression of this newfound freedom through intellectual debates in peer-based networks.
- Because of diversity and multiple identities of students, it is difficult for educators to have balanced academic relations with all learners. Limited one-on-one lecturer-student interaction potentially explains the migration of interaction that could have happened in class to online informal learning spaces.
- 'Transmission approaches that dominate university learning are subtle manifestations of unequal academic relations which have potential to affect learning. The knowledge based model of SNS offer opportunities for peer-based generation of knowledge, incrementally transferring responsibility from educators to learners, and challenging transmission approaches to learning.

The practical arguments I have presented above invite conceptual issues, which lie in the broader realm of general theory. At conceptual level, issues raised above invoke the following assumptions and theoretical issues:

- This CMC allows students disempowered by transmission approaches and seeking freedom of expression to articulate their thoughts and perspectives. These views on 'democratisation' of access to knowledgeable peers and knowledge construction through technology-mediated discourses are arguments that are anchored in Critical Theories of Technology (CTT). While CTT, is useful for examining the affordances (democratisation of access) and constraints technology use imposes on humans

(which I adopt in this study), CTT, fails to sufficiently examine the micro level operationalisation of power (in classrooms). To complement CTT in this area, I employ CTP's micro level strategies and application of power to examine power relations at this level.

- The fact that complex socio-cultural and historical factors (communicative competence, language, academic backgrounds) influence lecturer-student academic interaction in class (and online) and student participation in mediated learning activities, necessitate the use of Cultural Historical Activity Theory (CHAT) theoretical lenses to unpack this. With regards language use, I identify with Vygotsky's (1978) concept of mediated action that each psychological function appears twice in development once in the form of actual interaction between people, and the second time as an internalised form of this function (Vygotsky, 1978 cited in Kozulin, 2003). As such, language in discourses is an important mediator in the acquisition of higher psychological functions. While I use CHAT for unpacking mediated interaction, as a basis for tracing shifts in students psychological functions as they interact with academics in technology-mediated environments, I am conscious of its limitations for unravelling micro level relations of power. It is at this level that I employ CTP to examine the contestations of power in classrooms to complement CHAT in its area of weakness.
- The multiple backgrounds and complex identities of students in university classrooms mean that educators may struggle to have balanced academic relations with all learners. Theories of power that examine how power is socially constructed, negotiated, and contested (actions), on one hand, and how power is inferred from discourses (reflections on experiences), on the other, would theoretically capture the subtleties of interactive and psychological power. While I employ CTP for examining power relations, I am mindful of the technology-mediated nature of my research (SNS), that necessitates understanding the role of technology-mediated interaction as a basis for unpacking learning and development (that is, CTP's limitation). It is at this level that CHAT (especially the works of Vygotsky, 1978; Engestrom, 1987) comes quite vital through its focus on artefacts and human-mediated interaction as bases for appropriation of higher mental functions (that bring mental transformations/ shifts in mental functions). I therefore employ CHAT to complement CTP in its limitations-

that is, the artefact and human-mediated nature of psychological functioning, itself the basis for psychological power.

### **1.8. Conclusion**

The argument raised in this study is that although power/academic relations are crucial for fostering student meaningful learning, studying these relations in face-to-face contact is hard, given the limitations of monolithic, instructivist pedagogies. I therefore, argued that studying power relations and forms of learning nurtured in SNS (Facebook) could serve as a viable proxy for unravelling academic relations nurtured in face-to-face academic contact. The aforementioned opportunities in SNS (see Sections 1.3.5.1, 1.3.6.2, and 1.3.6.4) convinced me that they could be the best vantage point for grasping academic relations that happen in class. I have drawn on three broad theoretical approaches and practical arguments as ‘theoretical and empirical lenses for unpacking power relations and learning.

### **1.9. Organisation of the thesis**

The purpose of chapter 2 is twofold: 1) to discuss the literature on academic/ power relations and SNS with a view to provide insights into how the complex concepts of power relations and social networked learning have been conceptualised. 2) I discuss academic relations with a view to provide new insights into how the concept can be reconceptualised to illuminate understanding of how interactional power manifested and was contested in university.

In chapter 3, I discuss the theoretical framework that guided my study and discuss how these theories illuminate understanding of the problem of academic relations and learning in university settings. I examine the strength and limitations of three broad theories that constitute this theoretical framework namely, Critical Theories of Power (CTP), Critical Theories of Technology (CTT), and Cultural Historical Activity Theory (CHAT). I provide the areas of complementation of these theories that form the basis for their integration.

In Chapter 4, I discuss my research approach, the data collection, and methods of data analysis. My analysis framework is informed by my theoretical framework that serves as the theoretical and analytical ‘lenses’ for the examination and interpretation of empirical data.

In Chapters 5, 6, and 7, I present my empirical research findings. In Chapter 5, I analyse lecturer-student and student-peer textual interactions (postings) on Facebook as ‘windows’ to grasping how students learned and the relational power struggles that emerged through these interactions. In Chapter 6, I examine the learning and power relations that obtained in face-to-face lecturer-student and student-peer interaction in classrooms and the influence of Facebook on classroom activities. In Chapter 7, I examine how learning and relational power were manifested in human actions and discourses. The empirical data were lecturers’ narratives of their lecture experiences, student interview transcripts of Facebook interactions and lecture experiences, and students and lecturers’ actions and discursive practices (observation transcripts) in classrooms. These findings demonstrated how relational power was negotiated and contested.

In Chapter 8, I discuss the results, with specific reference to my research questions. This section comprises three parts namely, discussion of Chapter 5, 6 and 7 findings respectively. It also constitutes a build up towards Chapter 9.

In Chapter 9, I conclude and provide recommendations and the implications of my study for further research. In the same Chapter, I review my research process, shedding light on the credibility of the research and research limitations.

## **CHAPTER 2**

### **Literature Review**

#### ***2.1. Introduction***

In the previous chapter, I discussed the complex character of academic relations and learning in traditional lecture settings and presented SNS as a proxy for examining them. In this Chapter, I discuss the literature on SNS and academic/power relations with a view to better understand the different perspectives from which they have been conceptualised and dealt with in academic literature. More significantly, I intend to contribute new perspectives on the understanding of academic relations. I draw upon these new perspectives in my Chapter 3, as building blocks for my theory of academic relations in SNS.

#### ***2.2. An overview of literature on power and social networked learning***

In Chapter 1 (see introduction), I highlighted interactional power as the heartbeat of academic relations therefore, I discuss academic relations in the light of social power. Academic/power relations have been a fiercely debated issue in academic circles (Carspecken, 1996; Ritchie, Rigano & Lowry, 2000; Gowe, 2002; Ares, 2006). What is interesting is that this literature on power relations in classrooms dwells much on exposing social power strategies, its exercise, expression and its implications on learning to the exclusion of a discussion on the mediating role of technology in cognitive development. Given the prevalence of the Internet generation<sup>20</sup> whose learning styles and power strategies have been significantly influenced by their media saturation in comparison to their predecessors, such literature is increasingly becoming hard to apply without modification.

On the other hand, studies of online interaction have also unsurprisingly emphasised the mediational role of technology for learning but have turned a blind eye on power relations (Stutzman, 2006; Boulos et al., 2006, Cain, 2008). Thus, there is a dearth of literature that simultaneously engages with academic relations and technology-mediated learning (online interaction) particularly in SNS. The limited research that has examined power in SNS has

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<sup>20</sup> Though I argued that PDS have limited ICT literacy (particularly computer skills and the Internet), because of their underprivileged backgrounds, it is equally true that all students are exposed to the emerging social technologies like mobile phones, and I-pods,. That said, the level of sophistication of these gadgets might differ by class. For example, web-enabled phones are prevalent among elite class of students than PDS.

only done so with a focus on online social networking as anchored in surveillance practices, and how the Internet allows both democratic user participation as well as big companies to piggyback on user-generated content (Petersen, 2008; Albrechtslund, 2008) or power in information technology research (Jarsperson et al., 2002). These studies have not deliberated on power relations in SNS within an academic realm. My research examines academic/power relations and mediated learning in SNS and how they mirrors offline relations. In the following sections, I will first discuss literature that dwells on technology-mediated learning, followed by that on power relations, and then develop a synthesis of these two perspectives.

### **2.2.1. SNS and mediated learning**

Vygotskian theory of cultural mediation stipulates that the development of the child's higher mental functions depends on the presence of mediating agents in the child's interaction with the environment (Vygotsky, 1978 cited in Kozulin, 2003). He emphasised symbolic tools-mediators appropriated by the children in the context of particular sociocultural activities, the most of which he considered to be formal education (Ibid). My argument is that SNS emerge as psychological tools (mediators) that mediate student internalisation of higher mental functions through text-based interactions in quasi-formal settings.

A growing body of research literature points to the fundamental essence of SNS for formal and informal learning (Selwyn, 2007; Boyd, 2007; Boulos, Maramba & Wheeler, 2006). For example, Boyd (2007) investigates how SNS shape youth's public life. Her research concludes that SNS allow people to make sense of social norms that regulate society, allow people to learn to express themselves and learn from the reactions of others, and they make people make certain acts or expressions "real" by having witnesses acknowledge them (citing Arendt, 1998). I infer from Boyd that SNS give people power to express and deliberate their views. Given S.A. history of apartheid's repression of mass opinion, this newfound freedom of expression is important for young learners who enter into university. While Boyd's work is insightful with regards to how youth project and manage their online identities, her study does not relate such online experiences with face-to-face academic contacts nor does she study power relations, as does my work.

### **2.2.2. Social networking sites as knowledge repositories**

Boulos et al.'s (2006) research examines how the application and use of Web 2.0<sup>21</sup> sociable technologies and social software could enable health education and health care for organisations, health personnel, and patients. Their research acknowledges that these Web 2.0. applications (blogs, wikis and podcasts) present a revolutionary impact of managing and re-purposing online information and knowledge repositories including clinical and research information than traditional Web 1.0 model. To the extent that health education and health care involves interactions between relations directly affect these two parties. An in-depth understanding of academic health professionals (as caregivers) and students and patients (as beneficiaries), academic relations in SNS would support the development of pedagogical strategies that would contribute to what Boulos et al. (2006) term 'best practice model' of academic relations based on SNS interactions.

### **2.2.3. Web 2.0 technologies are drivers of informal learning**

Selwyn (2007) provides an overview of Web 2.0 enhanced learning especially Facebook and Second Life applications. He interrogates the evidence available for informal learning occasioned by the use of Web 2.0 applications, and the potential benefits and risks such applications pose for formal learning in educational institutions such as schools. His research reports that the benefits of Facebook are not straightforward but mixed. He cites Facebook use by less academically successful students who contest asymmetrical power built into the institutional offline positions of students and formal school system. Therefore, it affords these students with the "backstage" opportunities to be disruptive, challenging and resistant "unruly agents" (Ibid, p. 4). While Selwyn's focus on power in Web 2.0 technologies in U.K. schools resonates with my study focus, my research is rooted in resource constrained university environments where PDS are also involved, not the advanced technology environment of the West.

## **2.3. Studies on Power relations**

I have argued in this work that to the extent that academic relations involve people of more or less differential levels of social hierarchy, they are essentially relations of power. In general, "power has to do with relationships between two or more actors in which the behaviour of

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<sup>21</sup> Web 2.0 is the term given to describe a second generation of the World Wide Web that focus on the ability for people to collaborate and share information online.  
([http://www.webopedia.com/TERM/W/Web\\_2\\_point\\_0.html](http://www.webopedia.com/TERM/W/Web_2_point_0.html))

one is affected by the behaviour of the other” (Hall, 1999, p. 110 cited in Jasperson et al., 2002). The point therefore, is that power is embedded in relationships, it is transactional, and reciprocal in its actions. From research traditions on power, the dominant findings are that power is manifested in inter alia, the following:

### **2.3.1. Power as identity**

Identity approach to power interrogates concepts like race, colour, and social status as important descriptors in the conceptualisation of power in classrooms. Some studies have taken an ‘essentialist’ approach to identity and argue that these variables are embodiments of who humans are, determine how humans articulate themselves and that there is embodied authority in looking a certain way (Delpit, 1988; Hoodfar, 1992; Coleman, 2008). In her examination of power in the classroom Delpit (1988), describes five complex rules of power that influence debate over meeting the needs of black and poor students on all levels. Two perceivably essentialist rules of her identity approach to power are:

1. That issues of power are enacted in the classroom-the power of the lecturer over the student, power of an individual or group to determine someone’s level of intelligence, and
2. The rules of the culture of power are a reflection of the rules of the culture of those who have power. Middle class children, she argues, tend to do better in school than non-middle class children because the culture of the school is based on the culture of the upper and middle classes–those who have power.

Such theorisation though logical for explaining varied student participation in multicultural classrooms, is problematic to the extent that it fails to adequately account for middle class students who fail to excel academically and non-middle class students who excel. The problem with this approach to cultural identity is that it “treats members of a group as instances of a profile,” an essentializing practice that displaces cultural identity from the concrete individual into a typical instance of the individuals who share a culture (Weiss, 1998, p. 260 cited in Hunsinger, 2006).

I argue that power, embodies psychological adaptation in complex academic environments over and above its relational nature implied in Delpit’s theorisation. In SNS where students form academic and social support structures to share their experiences and knowledge my



conception of power is conceivable, given the possibility of students to assume new roles, leading to their assumption of power in relation to their peer network.

### **2.3.2. Power manifestations in power/social distance**

Social power has also been conceptualised in literature as power distance by Hofstede. Power distance describes the degree of tolerance by society members of unequal relations of power. It is true that “all societies are unequal, but some are more unequal than others” (Hofstede, 1980, p. 136). In other words, while inequality exists in every culture, the degree of [its] tolerance is different in each society (Brown, 1994b). For Hofstede (1986), in Asian societies the less powerful tend to accept unequal power as normal (hence are large Power Distance societies). In Western societies, cultural groups tend to resist unequal distribution of power (small Power Distance) (Hofstede, 1986 cited in Kasuya, 1998). By extension, in classroom interaction, these dynamics may affect the speaking turns, extent to which lecturer knowledge is uncritically accepted by students, the type of language used in lecturer-student interaction and the extent to which collaborative students work is tolerated. While Hofstede’s concepts seem to be powerful analytical tools, they remain macro analytical lens that fail to take account of the intra-cultural, intra-group variations and individualities within the same cultural group. In my work, I interrogate a proxy of power distance, which is social distance—the degree to which the lecturer’s hierarchical authority is accepted by students as normal and uncontested, online and in class.

### **2.3.3. Disciplinary power**

Disciplinary power describes social power embodied in the mastery of knowledge of a given discipline. Power is a mechanism constituted by the multiplicity of power/knowledge relationships between agents (Jasperson et al., 2002). Lecturers exercise disciplinary power over students by virtue of being generators, custodians, and assessors of what constitutes knowledge within a discipline. Students, in reciprocation, conceive lecturers as credible sources and assessors of theoretical knowledge in a particular domain and vertical relations of power are activated by this implicit understanding. Though I am conscious of this hierarchical form of power, I submit that it does not operate entirely solitary but in conjunction with other forms like lateral forms of power. A variant of disciplinary power is what Clegg (1989, p. 179) calls “dispositional power”—capacities [...] or position that entitles or enables someone to exercise power, but it does not necessarily imply its exercise. In my study, I examine the different roles that lecturers and knowledgeable students take in their interactions with students on Facebook to support them in learning Information Systems (IS).

#### **2.3.4. Seductive power**

Seductive power relates to the authority figures' use of charm or persuasion to win the minds of their subordinates without the threat of using force. Carspecken's (1996), critical ethnographic work on power in American primary classrooms exhibits that people skilled at 'charming' win loyalty from others through employment of culturally understood identity claims and norms. Individuals with charisma tend to hold people sway by virtue of their personal qualities and moral fibre embodied in their humour, wisdom and power of persuasion. In the classroom, I examined lecturer's strategies like those for gaining and retaining the co-operation and attention of learners like the use of persuasive and sympathetic language.

#### **2.3.5. Power as relational control embedded in discourses**

The interactional nature of social power invites theoretical and empirical lens that target strategies of relational control used by interactants. Power is embedded in regulative discourses and control of relations (Foucault, 1980; Fairclough, 1989; Gowe, 2002). Based on four discrete research sites, Gowe (2002) develops five theoretical positions on the functioning of power in pedagogy. While Gowe's work is useful for showing the techniques of power university academics could use during knowledge production in class, her study is not premised on PDS. In view of South Africa's landscape of social inequality between racial groups bequeathed by the apartheid legacy, it is useful to consider these contextual influences (of differentiation) in my construction of power relations in SNS based interaction.

### ***2.4. Towards a study of interactional power relations in SNS***

A limited number of studies interrogate power in SNS (Jarrett, 2008; Albrechtslund, 2008; Petersen, 2008) using theoretical reviews. For instance, Jarret (2008), investigates different genres of Web 2.0 technologies and differentiates interactivity from disciplining technology as defined by Foucault. Using Foucauldian theory, he describes how the implicit surveillance immanent in the use of SNS could become a self-policing activity. He explains that "as a seductive expression of power, interactivity [fostered in SNS] is based on condescension: a deliberate masking of power in order to effect control" (words in brackets added) (Jarret, 2008, p. 8). Jarret's (2008) work is based on review of literature and not an ethnographic case study in university settings applied in my work. The quest for rich understanding of relations of power in university learning from the perspective of research subjects necessitated me to

enter the 'live worlds' of the students and lecturers using critical ethnography. Most importantly, while Jarrett's study investigates the disciplining nature of the technology/software itself, my study examines how interaction in technology-mediated environments broadens understanding of power relations and learning.

Having surveyed the landscape of literature examining power in classrooms, on the one hand, and technology-mediated learning using SNS, on the other, this current research integrates these research traditions by examining power and learning in SNS (Facebook) as mirrors of tradition in-class interaction.

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## CHAPTER 3

### Theoretical Framework of the Study

#### 3.1. Introduction

In Chapter 2, I reviewed the literature on interactional power and social networked learning with a view to understand how academic relations and learning have been conceptualised in academic literature. In Chapter 1, I argued that to the extent that academic relations unfold between interactants in potentially differential<sup>22</sup> social relationships, they are relations of social power. In academia, this implies that agents with access to and control over the intellectual discourses that obtain in these social relations are academically most empowered. In this Chapter, I discuss the theoretical framework that provides epistemological ‘lenses’ that frame my study.

Academic relations are worthy of study because power and knowledge are intractably linked, and both are socially constructed through human interactions in context. This has been acknowledged in literature on power:

We should admit rather that power produces knowledge [...] that power and knowledge directly imply one another; that there is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations (Foucault, 1977, p. 27).

Power and knowledge are thus co-constitutive and presuppose one another. In academia, gatekeepers (educators and knowledgeable peers) who control and influence the production and articulation of scholarly discourses inevitably exercise power over students and peers, respectively. Conscious of the technology-mediated nature of SNS interaction, and the adage that ‘knowledge is power,’ I seek to unravel the influence of computer-mediated interaction on psychological and relational power and student learning, and the socio-cultural, contextual and artefact-mediated influences on power and student learning and development. To address these complex issues, there is a logical justification to unravel the following issues:

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<sup>22</sup> Even lateral relations can turn out to be hierarchical given the differences students may have in terms of cognitive resources, communicative competence, ‘cultural capital’ (Bourdieu, 1986) and psychological adaptation to complex learning situations.

- The different conceptual lenses with which social power in tertiary learning settings can be understood,
- The structurally derived effects (opportunities and constraints) of SNS on student online learning and academic relations.
- The influence of socio-cultural, historical and contextual factors on student participation and learning in SNS and exercise of power.

Addressing these theoretical issues necessitates discussion of three broad theoretical approaches, namely Critical Theories of Power (CTP), Critical Theories of Technology (CTT) and Cultural Historical Activity Theory (CHAT) respectively. I discuss them after explaining my epistemological stance.

I have already highlighted the theoretical gaps the three theories have and how I intend to address them in my research (see Section 1.7 of Chapter 1). I review these gaps in Section 3.6.

### **3.2. Epistemological stance**

As Madison (2004, p. 7) observes, “positionality is vital because it forces us to acknowledge our own power, privilege, and biases just as we are denouncing the power structures that surround our subjects.” In university academic relations, positionality is critical to exposing superior interactants’ (academics, knowledgeable peers) dominance and prejudices in knowledge production and its articulation that may circumscribe the actions of students or peers whom they have influence on.

The epistemological stance of this work is Critical. Critical paradigm’s purpose is to overcome modes of social domination and oppression. The Critical approach to emancipation espouses that:

A society owes emancipation from the external forces of nature to labour processes, that is, to the production of technically exploitable knowledge [...]. Emancipation from the compulsion of internal nature succeeds to the degree that institutions based on force are replaced by an organisation of social relations that are bound only to communication free from domination (Habermas, 1972, p. 53).

I infer from Habermas that emancipation of students from hegemonic practices emerges from scientific knowledge production and social relations based on democratic communication. As such, SNS (as a genre of technical knowledge) presents students with opportunities for democratising academic/ power relations depending on the way they appropriated it.

Apart from suppression of domination, Critical theory emphasises self reflection. As Habermas succinctly observes:

The course of the social self-formative process, on the one hand, is marked not by new technologies but by *stages of reflection through which the dogmatic character of surpassed forms of domination* and ideologies are dispelled, the pressure of institutional framework is sublimated, *and communicative action* is set free as communicative action. The goal of this development is thereby anticipated: the organisation of society linked to *decision making processes on the basis of discussion free from domination* (my emphasis) (Habermas, 1972, p. 55).

I infer from Habermas that self-reflection and democratic communication are cornerstones for SNS users' emancipation from domination by high achievers and authoritative lecturers. Therefore, the capacity of learners to appropriate SNS to participate in constructive academic discourses, and to exercise reflexivity unlocks potential for their liberation from authoritative discourses. In the sections below, I discuss my theoretical framework in detail.

In Chapter 1, I developed a conceptual model comprising three theories which served as a solution to the problems I articulated (see Section 1.7). In this chapter, I provide a detailed discussion of these theories.

### **3.3. Critical theories of power: An outline**

In my literature review on power, I identified several perspectives on power (see section 2.3.1-2.3.5). The missing conception of power is power as a psychological quality driven by human agency in social relationships and as a reciprocal effect of contextual, and cultural-historical influences. Such power provides scope for conceiving interactions that give rise to transformative learning and shifts in agents' epistemic frames (cognitive growth) as empowering-itself the essence of university learning.

My conception of power identifies with Brey (2008, p. 73) who perceives it as "relation[s] between human agents (individual or groups) in which one exercises power [or control] over another" as well as "a property of *social structures* that work to generate systemic outcomes that affect the behaviours and interests of agents in society." Extending Brey's relational view on power, I envisage power that manifests in epistemic shifts activated by interactional exchanges between more or less knowledgeable social agents. Epistemologically speaking,

while student text-mediated discourses (text-based conversations) in SNS are ‘windows’ to their mental structures activated in the immediate context (micro level), these structures are nevertheless instantiations of social practices (culturally derived experiences and common knowledge) recursively drawn upon.

### 3.3.1. Clegg and the Circuits of Power

Clegg’s (1989, p. 17) notes that circuits of power conceives power as “discursive field of force” socially constituted by everyday human interaction and human agency that is both liberating and constraining. His Circuit framework reiterates that: 1) power is relational and 2) a comprehensive understanding of power requires a three-fold perspective (that is, three circuits) (Clegg, 1989 cited in Silva, 2007, p. 176). These circuits comprise episodic circuit, dispositional circuit and facilitative circuit. The circuits metaphor hints to the relational character of power in contrast to viewing it a commodity that can be owned, seized, or retained. For Clegg, power is a force that like electricity, circulates through a medium and such media are social relations and discourses (Clegg, p. 176). In academia (SNS and classrooms), the media are intellectual debates academic actors engage in that trigger ‘mind control’ (Van Dijk, 2001), language modes that regulate actor’s conduct, and control on human relations like control of physical space and speaking turns.

### 3.3.2. Causal power

Clegg’s (1989), causal power draws on Foucault’s (1980), work on power and constitution of knowledge. This episodic circuit of power, hints the contestable nature of power. As Clegg (1989, p. 208) observes, “power always involves power over another and thus at least two agencies, episodic power will *usually call forth resistance* because of the *power/knowledge nature of agency*” (my emphasis). I interpret that because of its relational nature and expressive exercise, causal power invites overt reactions from agents upon which it is exercised.

### 3.3.3. Dispositional power

The middle level of Clegg’s model is the dispositional circuit, where rules socially construct meanings and membership relations. I interpret that socially imposed rules afford capacities and constraints on agentive action and shape mental schemas through which interpretation by communicants is given. I argue that dispositional circuit mirrors Brey’s two forms of power: “*power to*” (the power to realize outcomes) and “*power over*” (control over a person, thing, or process) (Brey, 2008, p. 75), and both forms of power seem conceivable in class and

online. In online learning environments, lecturers are empowered by virtue of being experts in their fields not only to give expert advice to students on academic matters (*power to*) but also to demand student academic conduct in virtual classrooms that is consistent with the values of professionalism, and mutual respect (*power over*).<sup>23</sup> In SNS, spaces where students hang out most and which they have more power over their peer-based network, students have greater scope for self-regulation of their debates, leverage to become their own experts, ‘determine’<sup>24</sup>, who can access information, and define the genre of language to use.

### 3.3.4. Facilitative power

The last circuit in Clegg’s model is the facilitative circuit. This type of power is understood in terms of its ability to produce and achieve collective goals, and it is the productive conception of power characterised by a nonzero sum game (Clegg, 1989 cited in Silva, 2007). This facilitative approach to power transcends the dominant intellectual traditions on theorising power that maintain a restraining approach to power and emphasise control over actions/resources. It is a more positive, proactive perspective on power that contributes to student production of their knowledge and triggers ‘generative classroom processes’ (Ares, 2006). For Ares (2006), generative classroom processes are processes that build on prior experience and foster student and communities’ dynamic, flexible knowledge and skills that support success in future activity. I propose that effective exercise of facilitative power in SNS unlocks and expands the capacities of learners for individual agency and reflexivity.

### 3.3.5. Foucault’s micro level perspective on power

#### 3.5.5.1. Power as a reciprocal and relational force

Foucault (1980), proposes a bottom-up approach to the exercise and negotiation of power. He notes that:

In thinking of the mechanisms of power, I am thinking rather of its capillary form of existence, the point where power reaches into the very grain of individuals, touches their bodies and inserts itself into their actions and attitudes, their discourses, learning processes and everyday lives (Foucault, 1980, p. 39).

The basic thinking imputed in Foucauldian perspective is that power is a force that is at work in interactants’ discourses, actions, and attitudes. Power is not a resource that is possessed, and internalised by an individual rather it is a capacity/force that is transactional and

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<sup>23</sup> For example, discussion forums or Internet relay chats

<sup>24</sup> This is the case provided they put privacy settings on their Facebook web pages to restrict access to ‘lurkers’ from outside their peer network. This, however, excludes Facebook site owners, who can access this information hosted on servers even if it was deleted.



relational. His perspective on power shifts attention from holders and non-holders of power towards the strategies academic actors deploy in the negotiation, and articulation of power. This perspective thus holds that both the lecturer and students are potential agents in the power relations in SNS.

### **3.3.6. Power as social distance**

Another perspective on power relates to the breaching of social boundaries and the abrogation of hierarchy. In situations where learners are weary of academic hierarchy, they tend to perceive their educators as cognoscenti whose authoritative voices are unquestionable and uncontested. Hofstede's (1980), concept of power distance sums up this monolithic form of symbolic control and its legitimization (see Section 2.3.2). I interrogate a prototype of social distance in academia called social hierarchy. My thesis is that Facebook use for academic consultation has potential to abrogate social hierarchy and thus democratise academic relations between academic actors (lecturers and students, student and peers). This could be motivated by the wider avenues SNS opens for knowledge sharing and exchanges of perspectives.

### **3.3.7. Delpit's conception of power in classrooms**

#### **3.3.7.1. Identity approach to power**

Some studies have conceived identity and culture as imposed by broader social structures like norms, values and practices, as such, enclaves in which cultural groups find hard to break away from (Delpit, 1988; Hoodfar, 1992). This deterministic position conceives culture and identity as static descriptors that define cultural groups' behaviour in ways that constrain diversity of actions and agency. For instance, Delpit (1988), discusses how an identity approach to power is constructed as a basis for social power and powerlessness in classrooms (see Section 2.3.1). My problem with the aforementioned studies (Delpit, 1988; Hoodfar, 1992) is that their conception of culture seems to be based on an automatic connection between possession of a particular culture (middle class culture) and academic performance, hence essentialist.

While the CTP are useful for an examination of micro level interactional power, they do not provide a plausible explanation on the mediational effects of technology on human

psychological functioning, especially in light of the technology-mediated nature of my SNS research. It is in this limitation of CTP that I find CTT worthy for that examination.

### **3.4. Critical theory of technology: An outline**

In this section, I examine the structurally derived opportunities and constraints that technology provides humans in technology-mediated learning and implications on power. I am informed by Critical Theory of Technology.

#### **3.4.1. Andrew Feenberg**

Critical theory of technology conceives of technology as human controlled and value laden (Feenberg, 2003). Human controlled implies that humans can appropriate technology to advance certain purposes (for example, social networking, or informal learning) and to activate new, unanticipated uses of tools. As Feenberg and Barney (2004) submit, all technological artefacts exhibit interpretive flexibility, that is, different participants in the design process differently understand them. In the context of academic relations, interpretive flexibility presents opportunities for students to appropriate SNS to subvert hierarchical power relations (lecturer-student, and student-peer) often exercised in classrooms. This is enabled by the capacity of CMC to neutralise individuating factors like status differences often characteristic of face-to-face interaction

Value laden, on the other hand, reflects that technological artefacts emerge from political and ideological contestations that occasion systems designers and participants in technological design process. At the user interface level, technology then imposes these values on users. Critical theorist of technology note that:

In the early stages, humans imagine the possible use of technology but as the technology is stabilized, its design tends to dictate users' behaviour more successfully and agency tends to recede into the background, at least until new demands emerge to challenge the established design (Feenberg & Barney, 2004, p. 14).

The argument in this theorisation is the dual, dynamic, and reciprocal relationship between human agency and technology. In view of students' academic participation on SNS, the critical question to ask is how these students and academics could gainfully use technology to benefit meaningful student learning.

### 3.4.2. Heidegger

#### 3.4.2.1. Critique of Technological determinism

Heidegger (1977), warns against the uncritical acceptance of technology as neutral and instrumental. He suggests that this naive celebration of technology leads to being chained and imprisoned by technology. He cautions that:

We shall never experience our relationship to the essence of technology so long as we conceive and merely push forward the technological [...] Everywhere we remain unfree and chained to technology, whether we passionately affirm or deny it [...] But we are delivered to it in the worst possible way as we regard it as something neutral [...] (Heidegger, 1977, p. 4).

In line with Heidegger's conceptualisation, I argue that in the S.A. university learning context, technological determinism, that is, the view that universities can appropriate learning technology as tools for furthering educational development without taking stock of its setbacks on humans, could erode student meaningful experiences with technology. Students are diminished to consumers who uncritically appropriate a product (technology) and its by-products (information, knowledge). This fosters the development of unbalanced academic relations as it forecloses the possibilities of using technology in innovative ways to promote knowledge production while diminishing the negative consequences of technology on human agency. This way Heidegger (1977, p. 17) explains, learners are manipulated by technology as "standing reserves" aligned to controlling disposition of technology.

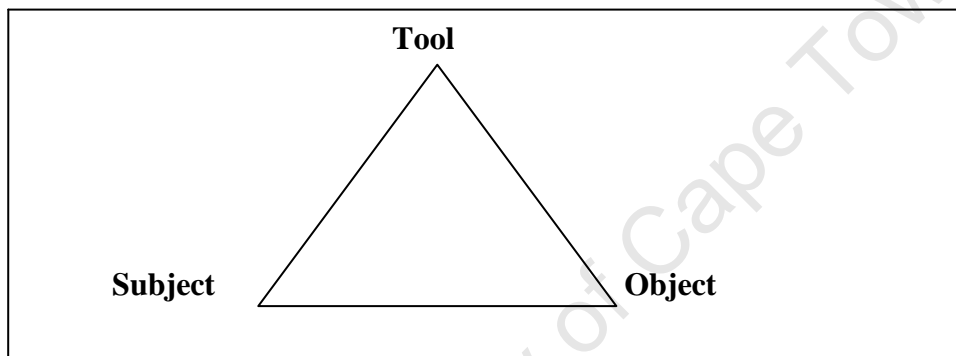
While CTT is a logical theory for my study, given my focus on the democratization opportunities and disciplinary effects that technology-mediated interaction offer students, the theory is limited for examining mediational artefacts/technology's influence on human psychology- the basis for 'expansive' learning (Engestrom, 1987) and development. This is critical to this study given my argument that power is also a psychological construct (apart from social), and that the underperformance of PDS in university is attributable to limited mediated learning experiences (Feuerstein et al., 1980). It is in light of this limitation of CTT that I adopt CHAT as a complement of CTT to plug the limitations of CTT in this area.

### 3.5. Brief History of Cultural Historical Activity Theory (CHAT)

#### 3.5.1. Vygotsky and Semiotic mediation

Arguably, Vygotsky (1978) developed the first well-documented formulation of a basic activity system.<sup>25</sup> Vygotskian thinking about cultural development is that human interaction with the social world is not direct but rather semiotic tools (language) and signs (symbols, numbers, formulae) mediate it. His stimulus-response theorisation on human action mediated by cultural tools constitutes the basic activity system. Figure 3.1 summarises his thinking about humans' goal directed consciousness -subject working to realise his/her object mediated by tools (language, speech, technology, and symbols).

**Figure 3. 1: The Vygotskian model of mediated action**



(Source: Thorne, 2004, p. 5)

Language is a mediational tool a lecturer uses for student appropriation of content into systematically structured knowledge, what Vygotsky (1978) terms 'scientific concepts.' My view is that social power is encoded in language tools like regulative discourses, critical questions and logical arguments which could be meant to control/structure the ways of reasoning ('mind control') of peers and to structure knowledge by more capable peers (for weak students) and by lecturers (for students). The Vygotskian argument is that cultural development originates from the social world and progresses into the individual where internalisation and transformation through mastery of knowledge occurs. This understanding is captured in Vygotsky's general genetic law of cultural development:

<sup>25</sup> Although the theorisation about activity has its roots in the writings of Hegel (1975, 1977) and Marx (1970)-their work on human relationship with the environment, work (division of labour), and the use of tools, it was Vygotsky (1978) who popularised the concept through his subject-tool-object triad.

Any function in the child's cultural development appears twice, on two planes. First it appears on the social plane, and then on the psychological plane. First it appears between people as an interpsychological category, and then within the child as an intrapsychological category (Vygotsky, 1930/1981, p. 163).

Therefore, social interaction mediated by psychological tools is critical to human psychological functioning and development. In fact, semiotic tools (like language and verbalisation) constitute the material artefacts through which humans draw on and learn about the social world. My view is that in SNS, students' epistemic frames are shifted as they interact with knowledgeable peers and academics in social context through SNS tools (questions, answers, elaborations), and as new information is acquired and inappropriate notions are discarded or reconstituted. These shifts in mental schemas constitute learning and psychological empowerment that potentially democratise academic relations as they form the basis for new perspectives and deep thinking for novices.

### **3.5.2. Scaffolding**

The concept of scaffolding has its intellectual roots in mediation, although Wood, Bruner and Ross (1976) and Bruner (1986) coined the term. Explaining scaffolding, Vygotsky employs the term Zone of Proximal development (ZPD) and defines it as:

[...] the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers (Vygotsky, 1935/1978, p. 86).

Scaffolding involves an adult/expert/knowledgeable peer interacting with the novice using tools to assist him/her in more complex problem solving that the novice may not otherwise achieve independently. Human agents (instructional support) and technological tools (Facebook queries, questions, and answers) can be used to scaffold learners. DeVries (1996) notes that Vygotsky (1934/1987) provides some hints with regards the kinds of assistance that children [or learners] can get: "demonstration, leading questions, and by introducing the initial elements of a task's solution" (Vygotsky, 1934/1987, p. 209). In my study, I am more concerned with methods of scaffolding the lecturer applied in Facebook as inferences about pedagogical strategies that can best support student meaningful learning, than methods of scaffolding per se.

### **3.5.3. Cultural Historical Activity Theory (CHAT)**

CHAT constitutes a system of views initially formulated within the collaborative investigative project by Vygotsky, Leontiev, Luria, and several scholars in the early 20th

century in Russia (Stetsenko, 2005). In Activity Theory, Kozlowski (2002) highlights, each activity is analysed as part of the collective and with a socio-historical context of the individual and of the collective, and hence CHAT. CHAT requires at minimum, a shared understanding of the character and history of the subject, the object into which the subject is attempting to reach, and the characteristics of the surrounding community and the tools available to the subject (Kozlowski, 2002). While CHAT offers a cogent theoretical view on artefact mediated-interaction on psychological development, the theory, insufficiently examines interactional power (see 4.2.6.2 for discussion), another critical facet of my study.

Influenced by CTP's views on the pervasiveness of power (Gower, 2002; Carspecken, 1996), my view is that social power is embedded in every element of the activity theory, (tools-in-use, rules (which CHAT does well), roles, community, and socio-cultural history of individuals, perceptions of the object). For example, student mental traces about the tools-in-use are recursively linked to and are instantiations of social structure, and hence relational and generative. As Giddens (1984, p. 25) suggests: *Structure is not "external"* to individuals: as *memory traces*, and as instantiated in social practices, it is in a certain sense more "internal" than exterior to their activities. It is this relational aspect of power embodied in mental schemas that manifests (at inter-mental plane) through discourses that CTP examines in ways CHAT fails to do. I bring these theories in complementation by using CHAT to examine the artefact-mediated nature of the shifts in mental schemas as a basis for learning and psychological development and CTP for examining how power is negotiated at an inter-mental plane through social action and discourses. This understanding is critical to SNS interaction where there is both collective knowledge production and self-reflexivity, dually and reciprocally constructed, in recursion.

#### **3.5.4. Engeström and third generation activity theory**

Engeström (1987, 2001) broadened the scope of Vygotsky's triad model and Leontiev's (1981), hierarchy of activity system the societal and contextual concerns, namely, rules, community and roles. While I recognise Engeström's (1987, 2001) work as central to Activity Theory advancement, I however use Russell and Schneiderhainze's (2005) analytical framework for examining in-class and Facebook learning activities. Their analytical framework fits the intent of my research: 1) to track and monitor student interaction on Facebook as a basis to infer their learning trajectory and development changes, 2) to

understand changes in lecturers' teaching strategies as a basis for developing a pedagogical model that supports students in SNE. CHAT constitutes what is generally conceived as third generation Activity theory. In my methodology chapter, I detail how Russell and Schneiderheinze (2005) further develop and apply Engestrom's analytical framework in their work (see Section 4.5.4).

### 3.5.5. Application of CHAT In interactive technology-mediated environments

#### 3.5.5.1. Lectures

As Roth and Lee (2007) suggest, one important feature of CHAT is that it lessens the theory-praxis gap due to the historical primacy of material, work-related activity over language and theory. In my intention to trace the origin of artefacts posted on Facebook, I examine classroom interactions.<sup>26</sup> Russell and Schneiderheinze (2005) analytical framework's capacity to track the evolution of activity systems allowed me to develop conceptual models of individual lecturer's activity systems, identify activity contradictions, and their resolution as forces for change in the object sort, or change in activity elements or work practices. A multi-method that combined lecture observations, in-depth lecturer interviews on how student use of Facebook affected academic relations and their learning, and post-observation debriefings was adopted. The nature of relations between lecturers and the students in-class and in Facebook learning environment was a function of the cognitive resources, student ICT literacy, and English language mastery, which are all sociocultural and historical factors. This is in addition to being artefact-mediated (multimedia, Facebook questions and answers), and the rules and subject's roles in context.

Though CHAT was useful for examining mental transformation, I was mindful of its limitations for examination of micro-level power contestations in activity elements and systems<sup>27</sup> on SNS. Conscious of this limitation, I argue that power relations manifest and play out at every node of the activity elements and in the activity system. Influenced by CTP, I contend that power relations are embedded in the *subject's* epistemic frames and histories, in shifting of mental states through use of *psychological tools* (Facebook questions and

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<sup>26</sup> My examination of classroom interaction does not contradict my argument that analysing classroom power relations is hard. This mirrors my intention to unravel power relations in Facebook by tracing the interactional context (classroom interactions) where artefacts emerge, without whose knowledge, the grasping of online artefacts would be difficult.

<sup>27</sup> Although Marx's concept of division of labour as characterisation of man's interaction with the social world approximates how power is exercised, this concept is inadequate for understanding of how power is enacted, manifested and articulated in social actions and discourses.

answers), the community members' relations they interact with in context (educators, peers, senior students), the learning *rules* (rules of engagement in Facebook), the different *division of labour* (vertical roles educators and students) assumed and the *object* focus and *outcomes*.

### **3.6. Overview of the theoretical approaches**

From an epistemological point of view, my research was influenced by two theoretical approaches –1. Critical Theories (CTP and CTT)<sup>28</sup> and 2. CHAT for the examination of learning and academic relations. For the purpose of this study, learning is defined as social interaction based on 'serious conversations.' Feldman (1999, p. 137) conceives of 'serious conversations' as dialogic and dialectic processes whereby participants bring forward, share, and seek new knowledge that can lead to new understandings. I contend that serious conversations are only possible in equal power relations among learners and their educators. I define development as 'expansive learning' (Engestrom, 2001) cycles that lead to in-depth understanding, transformed ways of thinking, and intellectual growth. I argue that democratised academic relations between students and peers, educators and students unlock possibilities for student assumption of self-responsibility for their learning, and creativity in search for academic solutions to problems.

The following are noticeable areas of complementation in these theories:

1. While the CTP provide a strong theoretical foundation for understanding how power is negotiated, and contested in learning processes, these theories are not explicit in terms of the role that technological artefacts play in individual mental development. While CHAT does not necessarily examine power relations in elaborate ways as CTP does, CHAT is illuminative in terms of demonstrating how mental shifts (useful for learning and development) are activated by the appropriation of psychological tools. Cognitive development and learning, according to Vygotsky (1978), essentially depends on the child's mastery of symbolic mediators, their appropriation and internalisation in the form of inner psychological tools (as cited in Kozulin, 1998). As Engestrom (1987) notes, a full cycle of expansive transformation may be understood as a collective journey through the *zone of proximal development* of the activity. This understanding of transformation as a journey provides scope for tracking activity systems as basis for understanding shifts in ways of learning/reasoning and practices.

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<sup>28</sup> Although I treat them here as one theoretical tradition falling under Critical paradigm, the CTT and CTP constitute stand-alone theories in so far as they examine different concepts namely technology and power respectively.



Therefore, I examined power using CTP, and employed CHAT as its complement to examine how learners' individual epistemic frames got transformed (learning) and how development was activated.

- 2 Although CTT are essential for exposing the forms of domination and opportunities technology presents, these theories lack a solid theoretical base for emancipating learners from this domination. On the contrary, CTP with their focus on reflexivity at both epistemological and ontological levels serve as effective complements of CTT in this area. Reflexivity at these levels unravels: a) power embedded in discursive practices and b) 'hidden forms of socio-political control' and 'identif[ies] socio-political inequalities' (Atkins, 2002, p. 1-2). In light of these areas of complementarity, I employ CTT to examine learning constraints and opportunities that emerge in computer-mediated interaction (SNS interaction), and CTP to unravel the negotiation of interactional power between human agents.

### **3.6.1. A Review of my analytical framework**

In the previous section, I discussed the areas of complementation between the three broad theories-CTP, CTT, and CHAT. In this section, I elaborate on these relationships with a view to provide an analytical framework that emerges from these theories and will guide my research process. I will employ this analytical framework to analyse my findings (see Chapters 5, 6, and 7) and to discuss these findings (see Chapter 8). The analytical framework discusses three main themes, human interaction, technology-mediated interaction, socio-historical and context influenced activity systems respectively. Common in all three theories is mediated action (human or artefacts mediated). Figure 3.2 is high-level summary of these theories and their relationships.

**Figure 3. 2: Analytical framework based on the three broad theories**

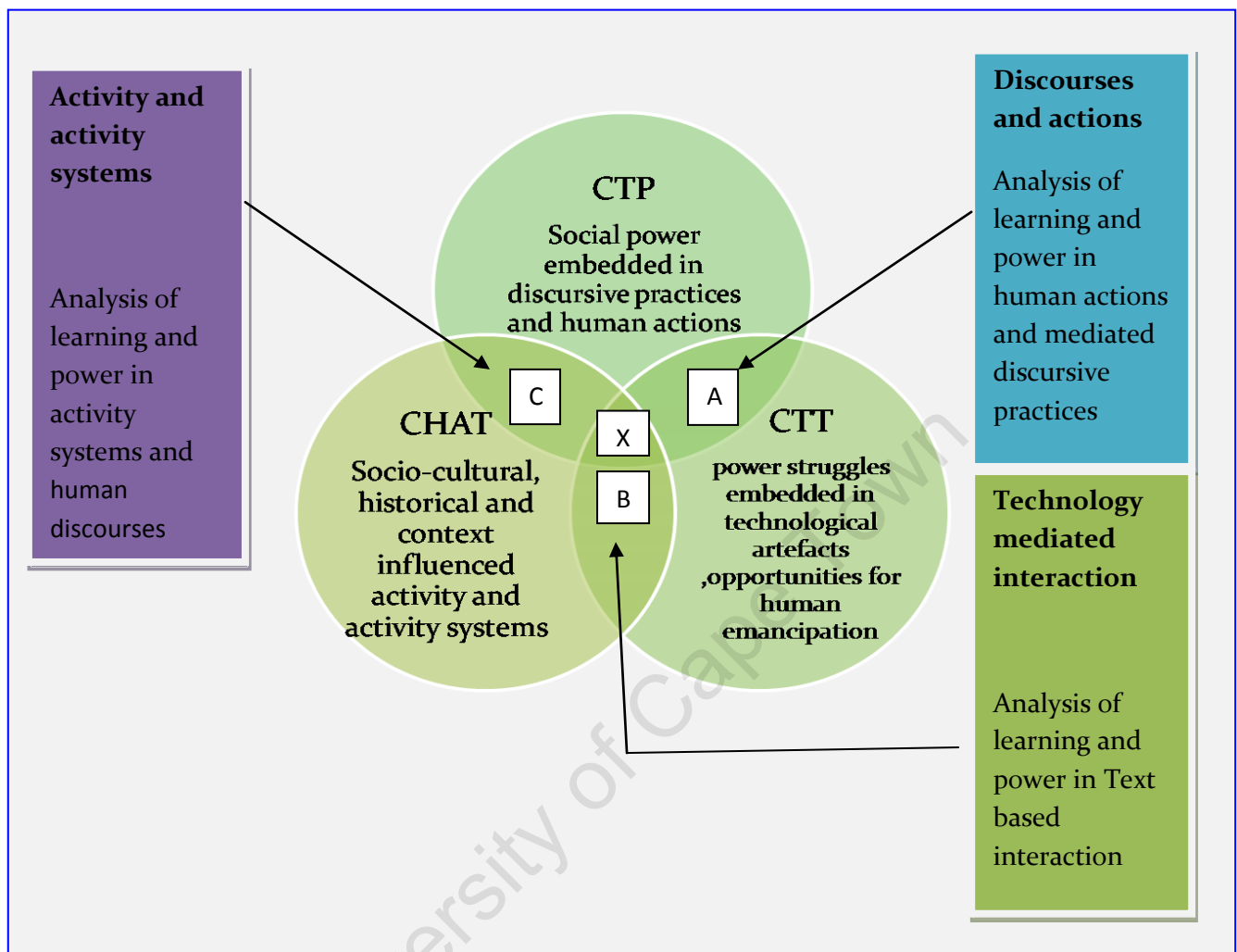


Figure 3.2 summaries the three theories and the main themes (appearing in bold letters) identified in each theory, their relationships, and the focus of analysis in each of them. X represents mediated action common in all of them.

### 3.6.2. Social power embedded in discursive practices and human actions

#### 3.6.2.1. Human interaction through Discourses and Actions

At A (see Figure 3.2), the intersection of CTP and CTT, the relationship is the joint commitment of both theories to unearth relations of social and psychological dominance (which I introduced in Section 1.1.2) to emancipate humans from subordination and disadvantage. In this regard, I employ Burnard's (1991) thematic content analysis (drawing on the work of Carspecken, 1996; Gowe, 2002) to analyse lecturer and student narratives

(interview transcripts) of their teaching and learning experiences and interactional power relations. I also employ Mercer (1996),<sup>29</sup> to examine student experiences (using a focus group discussion) of their use of Facebook for academic and social interaction. This section provides the analytical framework for Chapter 7 findings.

### **3.6.3. Political struggles in technological artefacts and opportunities for emancipation**

#### **3.6.3.1 Technology mediated interaction**

At B, the intersection of the CTT and CHAT, the relationship is the mutual consensus that technology plays a critical role in the mediation of psychological processes. From an analytical perspective, I use Mercer's (1996) Socio-cultural discourse analysis to examine student and lecturer textual messages' discursive styles as 'windows' through which to unravel how shifts in student epistemic frames (learning) were manifested through these messages and discourses. To grasp how relational power is negotiated and contested between academic actors (lecturers, student and their peers) in and 'behind' Facebook textual messages, I use Fairclough's (1989) CDA. This section provides the analytical framework for Chapter 5 findings.

### **3.6.4. Sociocultural, historical and context influenced activity and activity Systems**

#### **3.6.4.1. Activity and activity systems**

Where CTP and CHAT intersect, that is at C, the common attribute is the acknowledgement by both theories that structural factors (socio-cultural and historical circumstances) influence human interactions and psychological functioning. To unravel the influence of structural factors on lecturer-student interaction and student learning, I use Russell and Schneiderheinze's (2005) activity analytical framework.

I have highlighted the limitations of CHAT for unravelling how power is articulated and negotiated in situated contexts (see Section 3.5.3). To examine how interactional power relations manifest and are contested in discourses, I am influenced by Gowe (2002) and

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<sup>29</sup> This is the analytical link between CTP and CTT as I also use this analysis to examine text-based interaction under the CTT.

Carspecken's (1996)<sup>30</sup> views on micro level power. This section provided the analytical framework for Chapter 6 findings.

Finally, at X, the intersection of CTP, CTT, and CHAT is mediated action. Mediated action involves social engagement among educators, student and peers, and the broader academic community through language, technology, human agents, and other psychological tools (texts, questions, elaborations, symbols). My overall study's focus is thus located in the intersections A, B, C including X.

### **3.7. Conclusion**

In this chapter, I have discussed three theoretical approaches that underpinned my research on academic relations and learning, namely: CTT, CTP, and CHAT. I have employed them to examine three intricately interwoven issues: a) To understand how power relations have been conceptualised in CTP with a view to unravel lecturer and student actions and discourses as instantiations of academic relations in SN environments, b). Explore using CTT, the opportunities and constraints computer-mediated interaction presents for student learning and understanding academic relations, c). Examine using CHAT, how learning and power relations unfold in historically constituted, socio-culturally embedded, and artefacts-mediated activity and activity systems. I have used this theoretical framework to inform the development of my analytical framework (see Chapter 4), presentation of findings (see Chapters 5, 6 and 7) and discussion (see Chapter 8).

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<sup>30</sup> The connection between CHAT and CTP at analytical level is these micro level theories of power.

## CHAPTER 4

### Methodology

#### **4.1. Introduction**

This chapter provides a detailed discussion of the epistemological foundations, methodological positions, data collection, and analysis tools adopted in this study. The purposes of a methodology are manifold-inter alia, to unravel ‘puzzlement,’ quest for ‘fitness of purpose’ of techniques adopted, to describe and critique (Kaplan, 1973; Miles & Huberman, 1994, Cohen, Manion & Morrison, 2000). My methodology strives to describe and unravel the complex power relations and learning in traditional educational settings by proxy, that is, through examining academic agents’ interactions on SNS. I employ this approach to illuminate understanding of power relations and learning in Facebook as ‘windows’ for understanding academic relations in real world settings (classrooms).

#### **4.2. Epistemological foundations**

Although I examine and interpret the lived experiences, and perspectives of my research subjects to expose their personal voices, the overall epistemological stance of my work is *Critical*. Critical epistemology is aimed at understanding the ‘political, ideological factors, power and interest shaping behaviours’ and such a perspective is geared at ‘understanding, interrogating, critiquing, transforming actions and interests that are often ‘taken for granted’ (Cohen et al., 2000, p. 35). To the extent that academic relations are essentially about relations of social and psychological power, authoritative control and domination of subservient groups in discourses and social practices are often immanent in these relations. To this effect, a Critical epistemological stance is useful to unravel how power relations (and learning) were articulated and contested in SNS and in lectures.

Critical ethnography provides effective analytical ‘lenses’ on how power is distributed in society and how it is contested among actors in a power relationship. To the extent that my study examined academic relations (relations of power between academics and learners, learners and peers), a Critical ethnographic perspective was deemed necessary for such an investigation. Though an ethnographic perspective proved to be a useful investigative and analytical framework based on thick descriptions, it was deemed inadequate given its

limitations to examine the configurations of power between actors in a power relationship. As such, a Critical ethnographic perspective (which emphasises criticality and positioning) allowed for the incorporation of ‘thick’ descriptions of interactants’ experiences of SNS while mindful of their relational power negotiations and contestations.

#### **4.2.1. Methodological framework**

##### **4.2.2.1. Social power and human emancipation through Discourses and Actions**

In Section 3.6, I discussed the relevance of CTP and CTT for enhanced theoretical understanding of interactive power that manifests in human actions and discourses. The consummate relationship between CTP and CTT is their joint commitment to unearth relations of social and psychological dominance to emancipate humans from subordination and disadvantage. For example, Foucault (1981) has a capillary conception of power, one that is embodied in discursive practices and discourses, unlocking possibilities for examining power that manifests at an interpersonal level. He aptly suggests that: “Power is not something that is acquired, seized or shared, something one holds on to or allows to slip away” (Foucault, 1981, p. 94). From a methodological perspective, this shift from centralisation of power towards its constitution in micro-level relationships permits the unpacking of its different manifestations, how it is contested through discourses as seeds of human emancipation.

For CTT, social dominance by technology is embodied in technology’s claims to instrumental rationality. As Adorno writes:

It is not technology which is calamitous, but its entanglement with societal conditions in which it is fettered. I would just remind you that considerations of the interests of profit and dominance have channelled technical development: by now it coincides fatally with the needs of control (Adorno, 2000, p. 161–162).

I infer from Adorno that technology on its own is not a threat to human agency but rather its instrumentation and appropriation that extends control. For example, when academics prescribe a particular form of SNS use, without necessarily exposing students to other innovative uses of this technology, SNS become an instrument of institutional control.

Although CTT is useful for explicating how technology use can constrain as well as enhance the shifts in epistemic frames (the basis for psychological empowerment), the theory lacks an empirically grounded operationalisation of power, and social theory on emancipation (Brook (2002). In light of these limitations of CTT, Silva suggests that these approaches:

Do not take full account of power and politics. To do so these [...] meta-theories would need to be complemented with a theoretical framework that focuses concretely on power. Such a theoretical framework should point out the concepts and pieces of data necessary for a rich interpretation of power and politics in IS (Silva, 2007, p. 175).

It is in light of this proposition that I adopted CTP to merge with CTT to complement it (CTT) in this area of weakness (micro-level theorisation of power). At the macro level, therefore, Gowe (2002) and Carspecken (1996) (from CTP) were employed for the analysis of micro-level manifestations of power in relations and discourses and CTT was used for the examination of text-mediated interaction (Facebook text messages).

#### ***4.2.2.2. Political struggles in technological artefacts and opportunities for emancipation in Technology-mediated interaction***

Given the technology-mediated nature of SNS interaction, CTT provides a useful theoretical basis for examining the opportunities and constraints that SNS provide for learners (especially PDS) as a basis for their academic emancipation. That said, although CTT provide theoretical lenses for unpacking these technological effects, it does not necessarily inform understanding of how artefact-mediated interaction gives rise to changes in mental schemas that form the basis for learning and development. It is in this theoretical gap of CTT that CHAT comes quite indispensable. CHAT's focus on the appropriation and internalisation of symbolic mediators, and artefact-mediated interaction as critical to systemic contradictions that activate shifts in mental schemas and work practices, makes it theoretically plausible for this mission (examining learning and development). This is important given that although learning is socially mediated through dialogic interaction, it is also an essentially psychological activity. Conscious of this complementary, I adopt CTT to examine the democratising and disciplining effects of technology use at theoretical level, and CHAT, to examine how technology-mediated interaction gives rise to shifts in mental structures/frames of students.

#### **4.2.2.3. Power in Sociocultural, historical and context influenced activity Systems and human discourses**

CHAT and CTP emerge as distinct theories that examine different issues. Although the CTP provides important 'lenses' for the micro-examination of the instrumental part of power (how power is exercised) in lecturer and student actions and discourses, CTP is not necessarily concerned about artefact mediation and contradictions as forces for change. It is in this shortcoming of CTP that CHAT is useful, namely, the influence of structural forces and artefact (Facebook messages) on psychological functioning. In light of this, I therefore, bring these theories into a harmonious marriage-CHAT for the examination of the artefact-mediated and contextual influences on lecturers' teaching, and student's shifts in mental functioning (as expressed in human actions and discourses) and CTP for discussing the application social power in micro level settings (classrooms).

#### **4.3. Critical ethnographic approach**

Critical ethnography is adopted as a methodological approach for this study. Critical ethnographic research is [an] emergent process involving dialogue between the ethnographer and the people in the research setting (Myers, 1999). I engaged in dialogic interaction with first year IS students and their lecturers in face-to-face contact through interviews and debriefings after classroom observations and virtual ethnography. Given the Critical ethnographic approach adopted in my work, I had to be mindful of imposing hegemony over my research subjects through controlling discursive practices and communicative repertoires, despite envisioning subordinated groups' liberation from disadvantage. Simon and Dippo warn critical ethnographers of the need for reflexivity:

We should turn to a consideration of how the discourse we use to talk with others and through which we write and think, silences as well as articulates [...] At times we have a tendency to universalize our discourse, forgetting its regulatory impact. (Simon & Dippo, 1986, p. 201).

To this effect, I applied reflexivity at different levels: a) in revisiting my research assumptions and theoretical lenses as the research evolved for authenticity, b) in the research data by assessing respondent views in light of other possible permutations that could explain their responses, c) in the analysis of data, by allowing other researchers to review and validate my data analysis categories.



Critical ethnography draws on Critical theoretical perspective and ethnographic methods of investigation/inquiry. Conscious of this methodological blend, my choice of research methods were informed and drew on the strengths of this diverse mixture. These strengths include intersubjectivity (interpretation of the research subjects' views based on their experiences and corroborating them with the researcher's own schema of interpretations) to reduce incidences of biases, continuous dialogic interaction with research subjects (to identify shifts in patterns of data collected), grasping the influence of structural and contextual forces, and developing positionality in light of competing views and experiences. Mindful of this methodological stance, my research process involved multiple data collection methods namely, online ethnography (observation of learners' online collaborative interaction, online participant participation, and online data mining), direct observation of in-class power dynamics (involving lecturer-student, and student-peer interaction), in-depth semi-structured qualitative interviews of educators and students, and focus group discussions. This diverse mixture allowed me to use critical investigative and analytical perspectives, while keeping an eye on the need to interpret discourses, feelings and emotions to develop a thick descriptive but critical account of events, power relations and learning processes.

#### **4.4. Research Design**

This study employs a Critical ethnographic case study approach. Schensul et al. (1999, p. 5) observe that ethnographic research focuses on understanding a population in a broader socio-economic and political context, and this understanding is important in order to situate local experience and cultural observations. Mindful of my goal to establish the democratic potential of SNS use by students, understanding these students' experiences and interpretations of their academic life worlds was critical to locating these experiences in context. To develop a holistic perspective for researching these issues, a multi-method framework was necessary-one that allowed me to draw on the strength of interviews at different research phases (opening in-depth interviews, detailed follow-up interviews, closing interviews), multi-pronged online ethnography (online observations, online participant observation, data mining), in-class observations and focus group discussions (of Facebook users and non-users).

It is important to underscore that Facebook is just one among a plethora of SNS available in higher education. My choice of Facebook was informed by institutional and national context, methodological convenience and current trends in ICTs. That is:

1. At my contact university, facebook is the predominant institutionally accessed SNS for students, and hence a phenomenon worth of study.
2. Facebook is the dominant SNS at UCT where lecturers and students meet for academic consultation. This methodologically, therefore, means Facebook served as a convenient standpoint for examining power relations and learning between academics and students, and students and peers-which is the main goal of this work.
3. Currently, Facebook has the most profound impact among the youth worldwide in terms of youth presence, social artefacts sharing, and social interaction. This social interaction and exchange make Facebook relevant for examining interactional power.
4. South Africa is a nascent democracy, itself the last nation to attain independence in Africa, and with a strong history of disadvantaged groups' struggle to access freedom of expression. I envisaged Facebook to be a potential vehicle through which formerly underprivileged students and disadvantaged groups could voice their minds, articulate academic freedom and knowledge.

#### **4.4.1. Triangulation**

In his examination of case study design methods, Yin (1994) suggests that multiple sources of evidence enable the development of converging lines of inquiry-a process of data triangulation where any finding or conclusion in a case study is likely to be more convincing and accurate if it is based on several different sources of information, following a corroboratory mode. In this study, I:

- Mined<sup>31</sup> and examined Facebook postings the lecturers and students posted on (Facebook) during online consultations,
- Interviewed lecturers and students on their experiences of using Facebook,
- Held occasional debriefings with one lecturer whose classes I observed,
- Held two<sup>32</sup> focus group discussions with the interviewed students, and

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<sup>31</sup> Data mining allows access to a repository of original artefacts/postings for analysis.

- Observed lectures of the first year IS students<sup>33</sup>.

Patton (1987) discusses four types of triangulation: 1) of data sources (data triangulation), 2) among different evaluators (investigator triangulation), 3) of perspectives on the same data set (theory triangulation), 4) of methods (methodological triangulation). My research adopts all the four triangulation types:

- 1 Data triangulation (lecturers, tutors<sup>34</sup>, and students were all sources of interview and observation data),
- 2 Investigator triangulation—I corroborated my research categories and findings with the views of two lecturers (one, a lecturer who taught the ADP class, and another who also was researching Mxit<sup>35</sup> and 5 case study students),
- 3 Theory triangulation-I drew on CTP, CTT and CHAT and demonstrated their areas complementarity to improve credibility of the research findings,
- 4 Triangulation of methods-I employed qualitative in-depth interviews, in-class observations, focus group discussions (FGDs), debriefings, data mining for online postings. Multiple sites were investigated namely, Facebook ‘site,’ lecture rooms and computer laboratories.

Interviewed students were purposively selected<sup>36</sup> (those who used Facebook and those who did not).

## **4.5. Data collection process**

### **4.5.1. Pilot study**

A qualitative pilot study was conducted in February 2008 in the Faculty of Science with second year Computer Science students who used Facebook, although their lecturer was not on Facebook. 80 qualitative semi-structured questionnaires were distributed to these students

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<sup>32</sup> Although two FGDs (Facebook users and non-users) were conducted , I present the findings of users alone because my study examined how Facebook use affected academic relations.

<sup>33</sup> Although I emphasised that studying academic interactions in classrooms is hard and suggested studying them by proxy (through Facebook), it was necessary to observe classes for an extended duration to understand the origins of Facebook postings (that is, classroom interactions).

<sup>34</sup> Though tutors were interviewed, they did not interact with students on Facebook.

<sup>35</sup> Mxit is a genre of SNS that is based on instant messaging

<sup>36</sup> The IS course convenor and one regular lecturer printed a register of first year IS students and signed me on IS Facebook department group as a researcher-participant. I then used the e-mails from this register and participants on Facebook group to purposively select my participants (Facebook users, and non-users who appeared on the register and not on department Facebook group) and communicated to them on Facebook or via e-mail about scheduled interviews.

in class and students were asked to hand them back to the researcher<sup>37</sup> in the lecture session the following week. Although there was a low response rate (29 questionnaire responses), the pilot study was useful for testing the research instrument and fine-tuning questions posed for relevance to the area of study.

#### **4.5.2. Detailed research study**

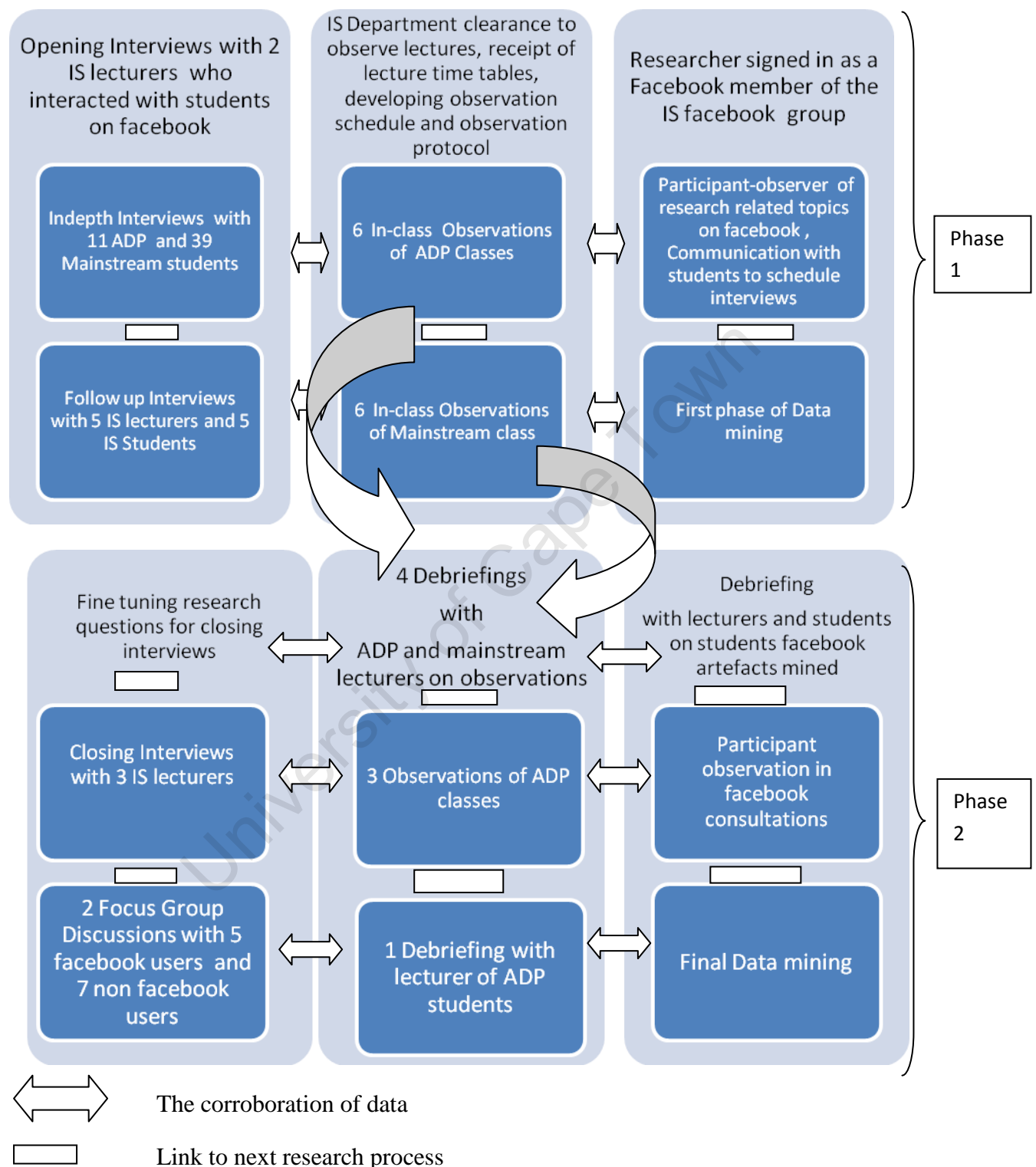
The pilot study was followed by a detailed research study that started with opening interviews with 2 case study lecturers in the IS department. One lecturer (a course convenor) authorised and signed me up as a member of the first year IS Facebook group for me to participate in the online discussions, 'meet' the students online and build the essential rapport for persistent interaction. I also employed Facebook to track the trails of online conversations as well as to recruit interview participants as all students had opened Facebook accounts.

The aforementioned lecturers subsequently introduced the researcher to their classes, and to their colleagues whose classes the researcher was also granted access for observations and student in-depth interviews. 15 in-class observations were conducted with the mainstream and ADP students and each observation lasted the average length of a lecture (45 minutes).

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<sup>37</sup> The /this researcher refers to me unless stated otherwise.

**Figure 4. 1:Detailed Research Process<sup>38</sup>**



<sup>38</sup> Although the 6 ADP class and 6 mainstream class observations appear in succession, it is just for illustration purposes. In reality, ADP and mainstream sessions observed were conducted in alternation as the class sessions were usually conducted on similar days-Mondays or Wednesdays. No mainstream observations were conducted in the second semester as they took the course for a semester.

Figure 4.1 provides a detailed outline of the data collection process I adopted in this study. The data collection process constituted two phases (as shown below)-Phase I involved the first semester and Phase 2, the second semester. It is important to note that the interviews, debriefings, observations, and online ethnography ran concurrently with corroboration of multiple evidence.

### **4.5.3. Data collection methods and Analysis**

#### **4.5.3.1. Observations**

This researcher<sup>39</sup> secured the consent of the respective IS lecturers teaching undergraduate classes to observe their in-class interactions with students. He became a permanent member of their classes and attended all lectures and lab sessions with the students. This move bolstered the mutual trust between lecturers and students, and himself. This afforded the researcher to observe the students in ‘natural’ settings and limited the ‘Hawthorne effect’-the tendency for the observed subjects to behave in conformist ways.

By observing situations ‘live,’ this researcher had the opportunity to:

1. Understand the academic impact Facebook had on in-class interactions and student learning,
2. To unravel other contextual and structurally derived factors that could also be at play in influencing in-class interaction,
3. To crosscheck the authenticity of lecturers’ perspectives on Facebook’s impact on in-class relations (as espoused in opening interviews).

Each lecture observation averaged the length of a lecture (45 minutes) and I conducted 15 in-class observations in total.

#### **4.5.3.2. Analysis of observations**

I used CHAT (Engestrom 1987, 2001;<sup>40</sup> Russell & Schneiderheinze 2005) for the analysis of observations of learning in technology-mediated environments (lectures and Facebook). Conscious of the limitations of CHAT framework for examining power (see Section 3.5.3), I

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<sup>39</sup> I use the term ‘the researcher’ interchangeably with the first person pronoun ‘I’ in reference to myself throughout this work.

<sup>40</sup> As the proponent of Activity Theory (AT), Engestrom’s (1987, 2001) work provides the activity elements upon which Russell and Schneiderheinze (2005)’s model draws for the actual analysis.

use CTP (Gowe, 2002; Carspecken, 1996) for the micro level analysis of power in class (see Appendix C).

It is important to provide a brief origin of CHAT so that its limitations on unravelling power/academic relations in micro-level settings (classrooms) and the justification for micro level analytical frameworks of power can be grasped. CHAT has its intellectual roots in Hegel (1975, 1977) and Marx and Engels' (1970) writings particularly their conception of work. Hegel suggests that what differentiates man<sup>41</sup> from animals is their ability to work and self-consciousness:

Man is a thinking consciousness...Things in nature are only *immediate* and *single*, while man *...duplicates* [*verdoppelt*] himself, in that (i) he is as things in nature are, but (ii) he is just as much for himself; he sees himself, represents himself to himself, thinks (Hegel, 1975, p. 31).

I infer that through human consciousness and work, humans interact and relate to the environment. This conception is also adopted in Marx's thinking about consciousness and division of labour:

*Man makes his life activity itself an object of his will and consciousness. He has conscious life activity [...] Conscious life activity directly distinguishes man from animal life activity. Only because of that is he a species being (my emphasis) (Marx, 1975, p. 328)*

It is on Hegel's concept of work and his trichotomy involving the *individual*, using *artefacts* to interact with the *nature /environment*, on the one hand, and Marxian concept of human activity mediated by the division of labour, on the other, that Vygotsky (1978) builds his formulation of the activity triad comprising human's (*subject*) stimulus-response (*object*) mediated by artefacts (tools).

Drawing on this foundation, the explicit reference to micro level power is largely embedded in the different roles (division of labour) that individuals assume in their interaction with the environment with a commitment to realise their object. Even the works of later Activity theorists (Leontiev, 1981, 1987; Engestrom, 1987, 2001) fail to sufficiently tackle using activity theory relational power struggles at micro level outside the framework of division of labour.

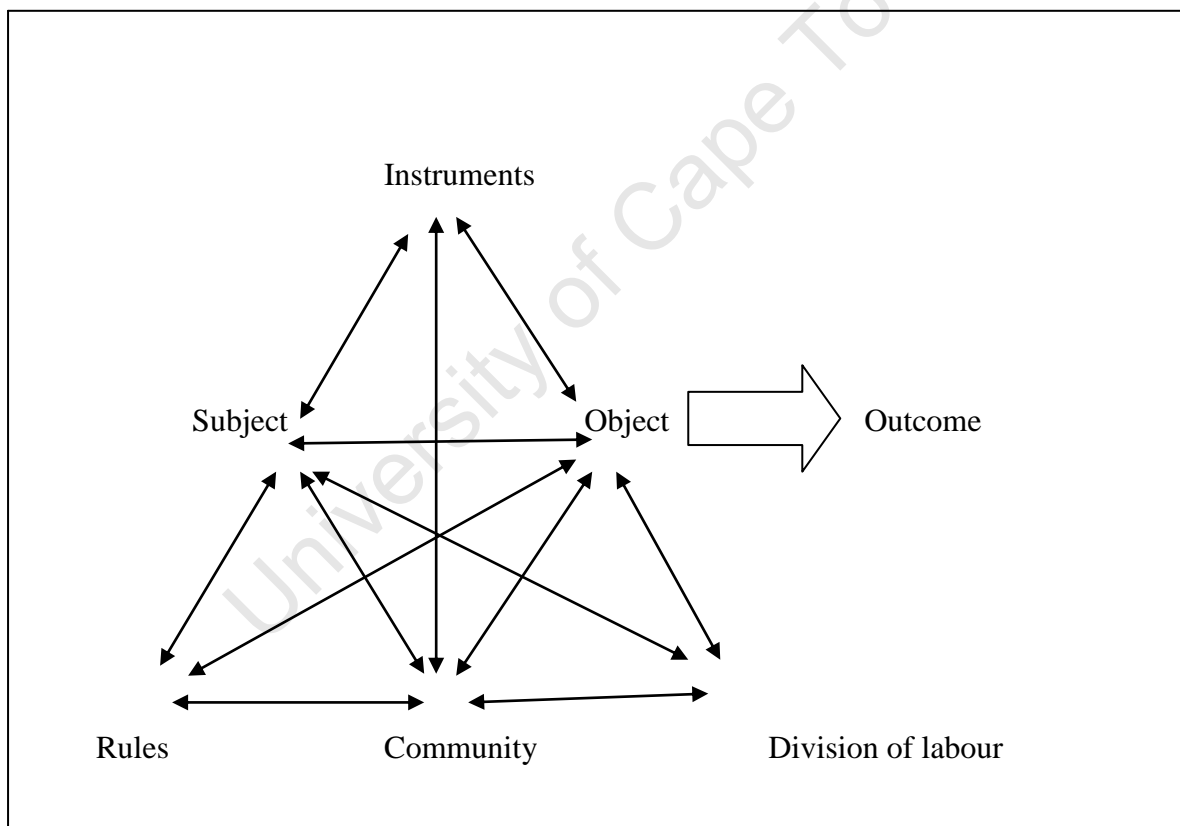
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<sup>41</sup> Hegel (1975) uses the term 'man' to refer to humans hence, man and woman.

#### 4.5.4. Lectures as Activity Systems

For Barab et al. (2001, p. 69), “an activity system can be an entire course, a particular class, or even an isolated event.” For my study, a lecture was adopted as an activity system, hence the unit of analysis. Although Russell and Schneiderheinze’s (2005) analytical model is influenced by Engestrom’s (1987, 2001) Activity Theory model, it transcends it owing to the suggestions it makes in the contradictions area. I will therefore, briefly explicate Engestrom’s analytical model. Engestrom’s (1987, 2001) AT model comprise: the subject, object, outcomes, mediated by tools (instruments), rules, roles and community as shown in Figure 4.2.

**Figure 4. 2: Components of the Activity System**



(Source: Engestrom, 1987, p. 78)



Russell and Schneiderheinze's (2005) analytical framework suggests that research questions be developed during data structuring to aid the researcher in understanding how the subjects (educators/students) responded to the activity implementation process (SNS or in-class interaction). Russell and Schneiderheinze (2005) suggest that an activity system analytical framework should involve the following stages:

1. *A detailed description of the subject's experience of participating in the work activity over an extended time frame, drawing upon multiple sources.* My research examined the activities of three lecturers, two of whom used Facebook<sup>42</sup> for student consultation over a period of approximately two semesters (one year). My multi-source framework combined lecturer and student interviews, observations, post observation debriefings with lecturers, and lecturer and inferences from student online postings, to gain insights into the activity under discussion (SNS interaction's impact on academic relations and learning).
2. *The researcher identifies the nodes of the subject's work activity system and creates the Activity Theory (AT) Model for each subject using the subject's voice in both her collaborative interaction with the other subjects and in his/her reflective dialogue with the researcher.* I created three AT Models for the three lecturers based on their interaction with students on Facebook (and blogs) and on my interviews with them.
3. *The researcher identifies contradictions occurring in the development of the object, as perceived by the subject, and categorizes them as contradictions she can or cannot resolve.* I identified unresolved contradictions on the model using a solid broken arrow, resulting in the lessening of the potential of the subject to develop her object, or as a dashed broken arrow when the subject identifies the contradiction and resolved it, resulting in the increased possibility that she would meet her object goals.
4. *The researcher identifies the turning points indicating how she responded to the contradiction and, subsequently, the way her response influenced the transformation of object, the manner of implementation.* As a result, the researchers could identify case by case contradictions and turning points which resulted in widening, narrowing or disintegrating of the object (Russell & Schneiderheinze, 2005, p. 43).

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<sup>42</sup> The other lecturer used blogs, which is also a genre of SNS.

My appropriation of this analytical framework is premised on the following justifications: 1). The need to explore how Facebook scaffolded learners over an extended period of time, 2). My motivation to unravel how lecturers resolved contradictions as a basis for exploring suitable pedagogical models that could best support student meaningful learning. 3). My quest to trace how students' epistemic frames got transformed by lecturer-student and student-peer interaction in Facebook.

#### **4.5.5. Analysis of power in classroom observations**

My conceptualisation of power is both interactional (how power is acted out in human actions) and psychological (power encoded in text-mediated discourses). I contend that power relations among interacting subjects emerge at every node of the activity system. For instance, in enforcement of rules (what Foucault (1972)<sup>43</sup> calls *rules of exclusion*), in different levels of conceptualisation of and appropriation of artefacts (tools), in object formulation, in the different roles subjects assume [well articulated by Activity theorists], and in socio-historical influences on mental functions as subjects interact to realise individual and collective goals. It is in light of this view that I adopted Gowe (2002) and Carspecken's (1996) conceptions of power to complement CHAT in its areas of weakness. To analyse how academic /power relations and learning were affected by academic actors' use of Facebook, categories and some sub-categories were developed. These emerged from the observational data transcribed and from my reflections on Carspecken's (1996) work on critical ethnography of power and Gowe's (1995, 2002) micro level analysis of power (for a full account of the categories see Appendix C).

#### **4.6. Interviews**

The course convenor availed the researcher with the course registers with all registered IS students' names and e-mail addresses for contacts. He also signed me on the IS Facebook group as researcher-participant. By signing onto Facebook, I had right of access to student's profiles. I selected 85 students and contacted them via Facebook for some scheduled in-depth

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<sup>43</sup> I am conscious of the post-structuralist tradition from which Foucault's (1980) work (which Gowe's (2002) work draws on) emerges, the structuralist tradition from which CHAT is grounded, and the methodological challenge of drawing on different traditions. Yet these categorisations into functionalist and post-structuralist are highly contentious as different scholars categorise their and their peers' work differently. My view is that although Foucault's capillary conception of power constitutes a bottom-up approach, it does not completely discard the influence of structurally imposed notions of power, just like CHAT focuses on socio-cultural influences on human psychological functioning. Besides, theoretical compatibility of the theories emerges from the fact that I use them to address different things- learning for CHAT, and power for Critical theories of power.

interviews, but 50 students were successfully interviewed. Of these, 39 were mainstream students<sup>44</sup> while 11 were from the ADP, a fairly smaller class.

#### 4.6.1 Interviewing Process

The interviewing process followed three phases namely: 1) opening in-depth interviews, 2) follow-up interviews and 3 closing interviews. The opening interviews with two IS lecturers investigated lecturers' motivations for introducing Facebook consultations and the forms of interactions activated by this use. The opening interviews were fairly shorter, lasting about 45 minutes. The first 50 interviews with students interrogated their use of Facebook, structure of their online and offline networks and nature of their relations with academics.

5 in-depth follow-up interviews with IS lecturers including one outsider (from Film and Media studies lecturer) were aimed at soliciting their views on what academic support they rendered students on Facebook, nature of academic relations lecturers had with students on Facebook, and how their teaching strategies were influenced by their use of Facebook. The outsider's view constituted an 'independent' opinion<sup>45</sup> against which IS lecturers' views were counter checked. The follow-up interviews were longer, lasting on average an hour. I also interviewed 5 students on the academic value of their use of Facebook and the inclusivity of their academic environment. Follow-up interviews also allowed for the interrogation of new issues that sprang from the opening interviews and the clarification of patterns emerging from observation data and the first phase of data mining (see corroboration of sources in Figure 4.1).

Closing interviews provided a synthesised perspective on outstanding issues from previous interviews, and interrogated evidence emerging from the second phase of observation data and my reflections from participatorily observing Facebook interactions. Among other issues, I examined the impacts of Facebook on lecturers' pedagogical styles. These interviews lasted on average 30 minutes.

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<sup>44</sup> Inclusion of mainstream students (who were technically PAS) in a study intended for PDS is twofold: 1). though Facebook was specifically intended for PDS, both PDS and PAS with queries were required to use this space. 2) Even for in-class observations, Facebook's impact was discernible in all classes (ADP and mainstream).

<sup>45</sup> This lecturer was also researching a SNS genre called 'Mxit' (an instant text messaging service run on mobile phones)

#### 4.6.2. Coding and analysis of interviews

A modified version of Burnard's (1991) thematic content analysis was used for the coding and analysis of the three interview data sets. His content analysis involves the following stages:

1. Reading carefully through the data to identify main themes. It is a process of getting immersed in the data.
2. Re-reading the transcripts carefully to identify specific loadings and categories, and shedding of irrelevant material (open coding).
3. Resorting categories and grouping similar headings to form a formal list and removing extraneous materials.
4. Two colleagues are invited to blindly validate research findings and three lists of categories are discussed and adjusted. In my case, a colleague (lecturer) who was doing research on the use of Mxit and one ADP lecturer whose classes the researcher observed, and 2 students were asked to validate the list of categories and preliminary findings.
5. Transcripts and categories are [re]examined identifying the data relating to each category and data is linked to category headings.
6. Transcripts are coded according to the developed categories and sub headings.
7. Where applicable, themes and findings are linked to supporting theory [an amendment].
8. Respondents are asked to validate and check categories and adjustments are made as necessary. 3 undergraduate students, and the 2 lecturers (cited in 4) were asked to validate the findings.
9. Write up is conducted section by section with reference being made to transcripts.

## 4.7. Focus Group Discussions (FGDs)

Two FGDs<sup>46</sup> were conducted in the computer lab foyer (an open, and perceivably neutral venue) on late Fridays when many students were freer to avoid disruption of their learning activities. Consistent with virtual ethnography, I personally contacted students (5 Facebook users for one discussion session, 7 non-users for another session) via their Facebook pages to participate and asked them to confirm their availability. My intention was to understand in-depth how students experienced the use of Facebook for learning, how their use influenced their relations with academics and peers, what influence their academic histories and socio cultural backgrounds had on different kinds of use.

Of the 5 Facebook users, 3 were from the ADP class. Another focus group discussion (7 participants) comprised first year IS students who had not used Facebook at all. The latter FGD engaged with why these students did not use Facebook, and the contextual and social cultural influences that influenced non-use. All the discussions lasted about 1 hour 20 minutes and they were audio tapped using an MP3 audio recorder, and transcribed verbatim.

### 4.7.1. Analysis of FGDs

Mercer's (1996) *sociocultural discourse analysis* was employed for the analysis of FGDs. Mercer (1996) observed British primary school pupils talk<sup>47</sup> and developed three kinds of talk, which he also describes as representing different 'social modes of thinking.' These are:

1. *Disputational talk*, which is characterised by disagreement and individualised decision-making. There are few attempts to pool resources, or to offer constructive criticism of suggestions [...] Disputational talk also has some characteristic discourse features notably, short exchanges consisting of assertions and counter-assertions.
2. *Cumulative talk*, in which speakers build positively but uncritically on what the other has said. Partners use talk to construct a "common knowledge" by accumulation.

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<sup>46</sup>The focus group discussion for the non-users of Facebook was meant only to provide some insights into why some students refused or shied away its use. As such, these findings were not reported in this work because my study was concerned about Facebook use.

<sup>47</sup> My view is that although university freshman's thinking has higher levels of complexity and subtlety than pupils' talk, it emerges from discursive practices that are not very different in structure from those of meaningful primary school discourses. University discourses are rather advanced and highly abstract expressions of discursive practices and knowledge that are otherwise developed at lower levels of education. Given these connection threads, this analytical framework developed in primary education research has relevance for university learning.

Cumulative discourse is characterised by repetitions, confirmations and elaborations. [...]

3. *Exploratory talk* occurs when partners engage critically but constructively with each other's ideas [...]. Statements and suggestions are offered for joint consideration. These may be challenged and counter-challenged, but challenges are justified and alternative hypotheses are offered. Compared with the other two types, in exploratory talk *knowledge is made more publicly accountable and reasoning is more visible in the talk*. [...] (Mercer, 1996, p. 368–369).
4. I discovered a fourth genre of talk that emerged from the conversations in Facebook. It involved students consecutively posing separate/standalone queries to the online administrator to which she responded accordingly, thus generating a textual profile comprising separate, unrelated/uncoordinated questions and answers. The result was a build up of discrete conversations, though directed at providing relevant feedback to student queries. I call this *discrete talk*.

Mercer (2008) acknowledges that intellectual talk is challenging because any interaction has two temporal qualities: *historical aspect* and a *dynamic aspect*. Utterances said may invoke knowledge from the joint past experience of those interacting, or from the rather different kind of common knowledge which is available to people who have had similar, though separate, past experiences. The *dynamic* aspect implies that conversations are not planned, they *emerge* (Ibid).

#### **4.8. Online ethnography**

The IS department adopted a policy that required all first year students to sign up on Facebook and join the IS Facebook group. Despite this requirement, some students still did not use Facebook. Student earned 2% mark to their course work for signing up. One lecturer was designated as an online administrator that addressed the student queries on Facebook. This lecturer who taught both the ADP and mainstream classes was consulted by students through her private Facebook inbox<sup>48</sup>, Facebook wall and the Facebook discussion board<sup>49</sup>

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<sup>48</sup> Students had the option to send private personal messages to the administrator via email or through their private messages box to the administrator's private Facebook inbox.

<sup>49</sup> The discussion board is a super wall feature on Facebook where publicly accessible messages were posted.

(see a snapshot of the discussion board in Figure 4.3). The online administrator was consulted with on academic matters-both content related and course general course administration during the normal working hours (8. am-4.30 pm).

**Figure 4. 3: A Snapshot of the Information Systems Facebook Discussion Board<sup>50</sup>**

The figure above shows the Facebook discussion board. To the right of this board are the features that allowed students to join the IS group, view this collaborative space and share its features. The space to the left side was where postings were made.

Ethnographically, I not only closely tracked the student Facebook discussions on the wall and discussion board but also posted students some invitations to attend scheduled interviews with the researcher. At the end of the second semester, I liaised with the online administrator, obtained permission, to download all the postings of her interactions with students (including

<sup>50</sup> Note that the authentic names of IS staff members have been withheld and replaced by pseudonyms to protect my research subjects' identities. All the other features of this website are original.

student-peer) via the Facebook inbox, wall, discussion board. These postings downloaded had accumulated over a duration of approximately a year (about two semesters).

#### **4.8.1. Analysis of postings**

The data mined from the three Facebook spaces comprised textual messages-questions and answers posted by students and the lecturer. Each message posted carried the authentic name and profile picture of the sender such that the identity of the sender was known. To protect the identity of these Facebook users, where their postings/artefacts were used in this thesis, their profile pictures and names were withheld. The purpose of the analysis was to examine and understand the following:

1. The forms of learning that initiated and sustained on these three spaces. To understand the learning that was triggered by the discursive genres students generated, Mercer's (1996) discourse analysis was adopted as an analytical framework.
2. The relations of power that emerged from the discourses on Facebook needed analysis. An analytical framework that went beyond mere description of the genres of talk to examination of hidden meanings and power implications of the language, the metaphors, grammatical styles, and modalities used in discourses was more insightful.

#### **4.8.2. Fairclough's (1989) Critical Discourse Analysis (CDA)**

I use Fairclough's (1989) CDA for deconstructing relational control embedded in language as an everyday social practice. Fairclough provides a comprehensive definition of CDA:

[Is the study of] often opaque relationships of causality and determination between (a) discursive practices, events and texts, and (b) wider social and cultural structures, relations and processes; to investigate how such practices, events and texts arise out of and are ideologically shaped by relations of power and struggles over power; and to explore how the opacity of these relationships between discourse and society is itself a factor in securing power (Fairclough, 1995b, p. 132-133).

Thus through an examination and interpretation of discursive practices, events and texts of interactants (lecturer and students) and broader social forces, we can grasp the hidden manifestation of power, where that power is derived, as well as how that power is negotiated. In Facebook, it was important to unpack how students negotiated interactional power with



lecturers through discourse and how lecturers also reterritorialise power through certain discursive styles.

Fairclough (1989, 24-26) identifies three levels of interactive discourses as:

- (1). *Social conditions of production and interpretation*, that is, factors in the society that have led to the production of a text and how these factors affect interpretation.
- (2). The *process of production and interpretation*, that is, how the text has been produced and this affects interpretation.
- (3). The product of the first two stages, the text.

Corresponding to the three levels of discourse above, he prescribes three stages of CDA:

- *Description* is the stage which is concerned with the formal properties of the text.
- *Interpretation* is concerned with the relationship between text and interaction—concerned with seeing the text as a product of a process of production, and as a resource in the process of interpretation [...]
- *Explanation* is concerned with the relationship between interaction and social context—with the social determination of the processes of production and interpretation, and their social effects (italics added) (Fairclough, 1989, p. 26).

Fairclough (1989) suggests that power may also manifest ‘behind’ discourse through efforts to standardise language forms or impose specific language formats and this limits who speaks, who is heard, and about what (Fairclough, 1989 cited in Orellana, 1996, p. 336-337). Fairclough (1989) provides an analytical framework of power in discourse that includes inter alia, the following:

- (1). Looking at the words and metaphors that are chosen [by discursive participants] in relation to their *experiential, relational, and expressive values* (where the choice between one word over another encodes assumptions about power relations),
- (2). How processes and participants are *encoded through grammatical features* (for example, where agency is named or not named, the active / negative framing of sentences),

- (3). *The relational values and authorial claims implied by selection of sentence modes* (questions, declarations, imperatives),
- (3). *Modalities* (with words such as ‘may’ or ‘must’ encoding relations of authority,
- (4). Pronouns (who is assumed as part of any subject position),
- (5). Linkages between sentences or ideas,
- (6). Large scales of structures of text (with regards *what is named, in what order, how logical links are made*) (Italics added) (Fairclough, 1989 cited in Orellana, 1996, p. 336-337).

#### **4.8.3. A Taxonomy of student identities**

This section examines conceptions of individual subjectivities /identities that emerged from student use of Facebook. Mustafa (2006) suggest that a constructionist and discursive view on identity shares that an individual is a socio-historical and socio-cultural product and identity is not biologically pre-given to a person, instead, *he or she occupies it*, and more importantly, this occupation may include *different and multiple identities* at different points of time and settings (italics added) (citing Gergen, 1991, Hall et al., 1992). I argue that, if an identity is not a given or ‘essence,’ then it implies that it can be acquired, and articulated as a resource for liberation from academic dominance.

Portes and Vadeboncoeur (2003, p. 383) discuss how socioeconomic status (SES) and culture may inform individual agentic behaviour in other settings and argue that agency formulated in earlier stages of development may make certain structural variables for the person ‘proximal’ and others ‘distal.’ Partly influenced by Portes and Vadeboncoeur (2003) and drawing on empirical research evidence, I identified five broad complex identities that emerged from the genre, direction, and motivations of student interactions on Facebook.

#### **4.9. Conclusion**

In this Chapter, I discussed the epistemological foundations, methodological stance, research approach and data collection processes of this work. I drew on a theoretical approach developed in Chapter 3 to provide a methodological and analytical approach that is based on CTP, CTT and CHAT. I also discussed the opportunities and implications of drawing on a multiple theoretical framework. I conclude that given the social and psychological nature of power, a discussion on power and mediated learning among first year learners in academic settings necessitates access to their social actions and mental structures.

## CHAPTER 5

### **Analysis of Learning and Power in Text based Interaction**

#### **5.1. Introduction**

In the previous chapter, I discussed my methodological approach, data collection and analysis process. In this Chapter, I analyse lecturer-student and student-peer textual interactions on Facebook as ‘windows’ to grasping how students learned and the relational power struggles that emerged through these interactions. Unravelling relational power online is important for this study given that the structure of technology-mediated academic relations affects student active engagement in transformative learning and academic empowerment. As such, I intend to contribute to the view that CMC is heralded for its power to break social boundaries, and to liberate individuals from social influence, group pressure and status and power differentials that characterise much face-to-face (FTF) interaction (Postmes et al., 1998; Turkle, 1999; Tidwell & Walther, 2002). While these studies are located in anonymous CMC where the identity of participants are potentially unknown or hidden, my approach is different to the extent that I examine SNS (Facebook) where the identities of interactants can be known, or potentially known. More so, examining how students learn is important for this study given the potential of meaningful interaction<sup>51</sup> to empower learners through levelling knowledge gaps among online participants. My argument that meaningful interaction in intellectual discourses is a basis for democratised academic relations (see Section 1.2 Chapter 1) finds backing from scholars who suggest that meaningful interaction must stimulate the learner’s intellectual curiosity, engage them in productive instructional activities and directly influence their learning (Hirumi, 2002; Vrasidas & McIsaac, 1999).

#### **5.2. Analysis of learning and Power in Text based interaction: An overview**

To unpack the modes of learning and how power is negotiated in Facebook spaces, I examine:

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<sup>51</sup> I have already characterised meaningful interaction as that kind of engagement, which is based on critical reflection, supports dialogic reasoning and productive knowledge generation.

- 1). How student epistemic frames were shifted by text-based interaction messages and discursive styles (see Research Question 1.5.7)
- 2). How SNS interaction (via textual messages) potentially disrupts academic /power relations and its subsequent effects on lecturer-student and student-peer interaction (see Research Question 1.5.3)

I use Mercer's (1996) Socio-cultural discourse analysis (SDA) to examine student shifts in epistemic frames implicit in textual messages and these shifts can be interpreted as a form of academic empowerment as they contribute to cognitive growth and reduction in student dependence on educators for academic support. Epistemic frames are mental models that allow students to conceptually grasp knowledge. As Wu et al. suggest:

A mental model is a conceptual representation of an abstract concept or a physical system that provides predictive and explanatory powers to a person in trying to understand the concept or the system and guides their interaction with it (Wu et al., 1998, p. 292).

Facebook text messages therefore, served as vantage points from which to understand student and lecturer construction of their knowledge and for ascertaining their shifts in epistemic frames as a basis for cognitive growth. These arguments make Mercer's (1996) SDA useful for this analysis given the essence it accords to explorative talk in discourse as a vehicle for individual cogitative processes.

While Mercer's (1996) SDA illuminates understanding of how different genres of talk reflect different modes of thought, his framework is limited for explaining how power is exercised and contested through discourses and how the broader social context shapes the discursive practices. It is in this limitation that Fairclough's (1989) Critical Discourse Analysis (CDA) emerges as a useful complement of Mercer's analytical framework (see second part of this Section). I employ Fairclough's (1989) CDA<sup>52</sup> to explore power in and 'behind' textual narratives exchanged between the lecturer and students, and student and peers. In the first part of this Chapter, I use Mercer's (1996) analytical framework to examine student shifts in epistemic frames. In the second part of this Chapter, I use Fairclough's (1989) CDA for deconstructing relational control embedded in textual language as a social practice.

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<sup>52</sup> I am conscious of different theoretical traditions from which Fairclough's (1989) CDA and Mercer's (1996) SDA were conceived to emerge (post structuralist and structuralist/functionalist respectively) and the perceived theoretical conflicts that come with applying them. However, these categorisations always pose challenges as different scholars characterise structuralists and post-structuralists differently. That said, I apply these theories to solve different issues –forms of learning manifested in discourses (Mercer) and power (Fairclough).

As already mentioned in Chapter 4 (see Section 4.8), besides lectures, students consulted with one lecturer using three Facebook spaces (see all Discussion board, wall and inbox postings in Appendix B). Presumably, students also informally consulted with one another using their Facebook private inboxes<sup>53</sup> as well.

### 5.2.1. Analysis of Text based Interaction

In this section, text based interaction is examined from two dimensions, namely discourses in the textual messages and genres of talk manifested. Because text-mediated discourse involves text messages and discursive practices via a computer medium among interactants who do not necessarily see one another facially, the effects of physical presence like ‘intimidating’ social emotional presence of the superior party are reduced or made less explicit (Jaffe, Lee, Huang & Oshagan, 1995; Kiesler, Siegel & McGuire, 1984). The extent of democratisation of academic relations on Facebook was manifested in the capacity it provided to students to contest/ complain about what they conceived as unpopular administrative practices, what they could not otherwise do in FTF relations because lecturer-student power differences. For instance, they grumbled about the Department requirement to have all students signed up on Facebook and join the IS Facebook group (see WP 130<sup>54</sup> and WP 141 in Appendix B). Despite being cast in a cold, sarcastic mode, these complaints were meant to register some displeasure with this requirement. This subtle critique to departmental practices manifest that Facebook presented students with “behind-the-scenes’ opportunities to be disruptive.

In the context of this study democratising communication means, 1) subverting hierarchical authority by allowing students to become more critically engaging online participants, 2). reducing student dependence on the lecturer for academic support, 3) Empowering students to generate their theoretical and personal knowledge and widen their active participation in online discourses, 4). allowing students to contest power through critiquing unpopular departmental actions. I will focus on 3 in the following sections and 1, 2 and 4 in the last part of this Chapter. The online administrator/lecturer, students and their peers engaged in the following discourses:

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<sup>53</sup> I did not examine student-peer private inbox conversations, as these would raise privacy concerns. Even for the administrator’s private inbox postings, she had to authorise me to download her private conversations with students for access and analysis.

<sup>54</sup> WP 130 means Wall Post 130

## 5.2.2. Text-based Discourses

### 5.2.2.1. Social-deliberative discourses

The first genre of discourse is what I term “social-deliberative discourses.” These discourses largely had a social character despite being academic related. While these deliberations were not IS content related, they were crucial for engaging students’ critical social awareness about the social problems faced by IS students. They hopefully, equipped students with lifelong learning skills like public self-expression. An example of students engaging in social-deliberative discourses based on the problem of brain drain in S.A. is in the Appendix (see DBP 5<sup>55</sup> and DBP 6 in Appendix B).<sup>56</sup>

The discussion sounds topical given the high incidence of brain drain among technical graduates in S.A. and the statement: “*Any current students around who have thoughts on the issue?*” suggests an attempt at sharing experiences and deliberating on them. These knowledge sharing experiences potentially trigger epistemological transformations as rival opinions emerge. Facebook thus democratised communication through creating a space for the collaborative generation and exchange of personal knowledge based on their ‘lived’ experiences. The kind of knowledge developed in such collaborative social discourses, consummates what Park (1993) terms *interactive knowledge*-knowledge that is created through exchanges or conversations among [academic] community members and is based on personal experiences.

### 5.2.2.2. Generative lateral discourses

These discourses were heuristic and generative to the extent that they were anchored in collective inquiry to find rational solutions to common academic problems. These student-peer knowledge exchanges were aimed at supporting the information needs of peers and bringing mutual understanding. Examples of this form of peer-to-peer consultation are outlined (see WP 56 and 57).

The information need is communicated through an inquiry-based question that the respondent has to develop a conceptual model for generating a logical solution for the inquirer. This transactional, peer-based support nurtures the development of personal agency and success in

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<sup>55</sup> DBP means Discussion Board Post.

<sup>56</sup> Because the IS Facebook group was open to any student in IS field these students (4<sup>th</sup> year and third year for the next post) also posted their messages.

the performance of more complex activities. Generative lateral discourses seem premised on the epistemological belief that humans construct their own reality through their interaction with other humans around them (intersubjective) and through their interpretation of their own world (intrasubjective). To the extent that text-based interaction nurtures theoretical knowledge in context, it demonstrates the productive side of technology when it is ‘human controlled’ (Feenberg, 2003).

### **5.2.2.3. Hierarchical discourses**

The dominant discourse on Facebook was the hierarchical discourse. Lecturers appropriated Facebook as a mediating tool for the systematic transmission of Access and Excel theoretical and practical knowledge. Hierarchical discourses enabled student acquisition of technical skills like database development, file sharing, and searching. An example of a hierarchical discourse expressed in a technical query on Excel appears on the discussion board (see DBP 61). A ‘question-based consultation’ (Ng’ambi, 2004) that exemplifies the lecturer imparting literature review skills on students is displayed on the discussion board (see DBP 109 and WP 83).

The fact that transmission of content dominated the discourses on the three Facebook spaces suggests that many students had not fully developed the capacity for self directed learning. This dependence on the lecturer for support worked to undermine student exploration of technology to effect more generative lateral discourses, thus contributing to technological determinism. As Heidegger (1977) suggests humans need to have a “free relation” with technology so that they are not imprisoned by it (see Section 3.4.2.1). To the extent that these students relied on technology to access academic support in ways that enforced dependence, technology aligned individuals with the goals of the particular formation of power mobilising that strategy-what Jarrett (2008) calls disciplinary technology.

In extreme cases, this technological domination often manifested in technophobia and non-use of SNS. As one PDS noted in relation to Facebook use:

I am kind of technophobic, I am not very experimental for anything that is technical. So I limit myself to the very basics. I use Yahoo and that’s just it. If I can type my work and just do the basics thus fine with me (Student interview 17/04/08).

### 5.3. Analysis of textual messages using Mercer's (1996) Socio-cultural Discourse analysis

Mercer (1996) identifies three kinds of talk, which are: *Disputational talk*, *Cumulative talk* and *Explorative talk* (see Section 4.7.1). In addition, I discovered a fourth genre of talk that emerged from Facebook conversations. I called this *discrete talk* (see Section 4.7.1). The following table highlights the different kinds of talk identified on the Facebook wall, discussion board, and inbox<sup>57</sup>. Out of a class of about 850 students, there were 165 participants who posted 414 posts. These participants posted 154 wall posts, 121 discussion board posts, and 139 posts to the administrator's inbox.<sup>58</sup> These postings were posted over a duration of approximately one year (two semesters).

Table 5.1: Frequencies of Genres of talk on Facebook spaces

	Frequencies of posts		
Type of Talk	Wall	Discussion Board	Administrator Inbox
Disputational	2	0	1
Cumulative	11	13	11
Exploratory	1	1	0
Discrete	13	9	10

The table above demonstrates a high frequency of cumulative and discrete talk. An in-depth discussion of the instantiations of each genre of talk is discussed below. Because students discussed issues in relatively similar ways across the three Facebook spaces, it is expedient for me to use the genre of talk and not the type of space on which postings appeared as the basis of my analysis. That said, I still highlight where the postings were extracted from in my discussion of genre of talk.

<sup>57</sup> For the Facebook discussion board, the topic under discussion formed the basis for determining the frequencies of a type of talk, while for the wall and inbox, the main themes communicated in the messages formed the criterion for ascertaining the frequencies.

<sup>58</sup> It is important to understand that several students would contribute to one genre of talk. That means there could be several students contributing in strikingly similar or unique ways to one theme or common topic and that would be considered as one genre of talk.



### 5.3.1. Disputational Talk

#### 5.3.1.2. Challenging serial, cumulative notions of learning

An intriguing exposé of disputational talk on the Facebook wall is a tussle between the online administrator and two students with regards the educational value of weekly quizzes students wrote. I cite this discussion participants' posts consecutively (See WP 46).<sup>59</sup> The student query highlights a perceived discrepancy between the quiz set and the content taught. The lecturer's response challenges the student's assumption that quizzes set should come from the latest chapters taught (see WP 44).<sup>60</sup> The lecturer's argument is that if a particular topic is covered in lectures, students should be able to tackle it irrespective of when it was taught. The student defences her earlier stance. She contends that even if the quiz demanded knowledge of previous chapters taught she could have well attempted these questions as she had studied them (see WP 42). She contests as inconsequential the lecturer's position that prior knowledge of taught chapters was a basis for successful quiz performance:

As the conversation heats up, a peer student joins the fray. He critiques the first student and the lecturer as well (see WP 41). The student challenges the educators to stick to what they [educators] alluded: *"If you guys say it [quiz] will be on something please stick to it ..."* (WP 41). Collectively conceived, the students' assertions were premised on the following epistemological foundations: 1). The acquisition mode where lectures should be pointers to the knowledge students are expected to demonstrate in quizzes. 2. They are cognitively incapacitated and time constrained to grapple with huge work workloads intended to tackle short quizzes. Exasperated by the students' flimsy arguments, the administrator reluctantly promises redress to these students (see WP 39).

If learning is conceived as serial, cumulative acquisition of knowledge, then the argument of consecutive deposition of content and its progressive provision in small packages is discernible. The lecturer challenges this conservative, minimalist notions of learning and reinforces a holistic, transformation driven approach (see WP 44). The lecturer shifts the student perspectives on what constitutes learning and this shift hopefully transformed their

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<sup>59</sup> Theron is the pseudonym of the online administrator cum lecturer who attended to student queries. I use this pseudonym throughout this thesis with reference to this lecturer. Note that all names used are pseudonyms except that I used female names for female students and male names for male students.

<sup>60</sup> Pseudonym for student.

mental states. This view coheres with my contention that cognitive shifts and transformative ‘learning’ cycles (Engestrom, 2001) form the basis for student psychological power. This section addressed the following question: *1.5.7. How are students’ epistemic frames shifted by lecturer-student and student-peer interaction in SNS?*

### **5.3.2. Cumulative talk**

#### **5.3.2.1. Inquiries on common theoretical problems**

A catchy feature of wall posts was the high frequency of cumulative talk. The prevalence of this phenomenon is understandable given the similar problems these novices encountered in tasks execution. The issues students queried included how to write up a literature review, missing marks, problems with submitting tasks online using a particular software (turnitin), and problems with task execution. The problems with using technology to submit tasks resound the view that although many students were exposed to technology, they were not technophiles.

These technological limitations of students subtly imposed lecturer authority even in supposedly ‘student controlled’ spaces (Facebook). This reproduction of expert dominance resonates with Delpit’s (1988)’s view that power is enacted in the [virtual] classrooms through educator’s power/influence on the student. An example of a theoretical inquiry is given (see WP 5). The challenges of writing up literature reviews seemed to be an endemic challenge among first years and this unsurprising given the novelty of the exercise for new university entrants. A related complaint is cited (see WP 9).

The distinct character of these interactions is the dominance of lecturer-directed interactions (vertical discourses) with limited cases of peer-based engagements (lateral discourses) on public Facebook spaces. The limited horizontal relations on issues of theory and practicals demonstrate that many students failed to broaden their consultative base beyond their traditional boundaries, namely, the lecturer. This finding resonates with Foucault (2003, p. 130)’s view on interactional power as power that makes individuals ‘subjects’ through tying them to one’s own identity by a conscience or self knowledge. Students were being subjectivized to both the lecturer’s stock of knowledge as well as her identity as the credible generator of theoretical knowledge within the discipline.

### **5.3.2.2. Scaffolding on Excel tasks and quest for extra lessons**

Cumulative talk between students and the online administrator on the discussion board is exemplified below. A black female student<sup>61</sup> inquires for help (see DBP 48). The student requests extra tutorials on Excel. The fact that many PDSs raised this query on practical related courses (Microsoft Excel and Access) demonstrates how past disadvantage subtly manifested among blacks. Although few PAS (indians and whites)<sup>62</sup> made similar requests for assistance, blacks seemed to be hardest hit. I identify with Delpit (1988) who suggests that middle class children tend to do better in school than non-middle class children because the rules of the culture of power are a reflection of the rules of the culture of those who have power. Because of the strong correlation between race, power, and advantage in S.A. due to the apartheid legacy, it is not surprising that white and indians students were comparatively better prepared for technology-mediated university learning than blacks were. Another black male posting below summaries this problem (see DBP 47). The use of literal translation (put in capital for emphasis) also expresses language constraints in addition to his vexation with technical aspects of the course.

As noted in see Section 1.1, students who failed to function in SN environments had a high chance of feeling powerless and prejudiced in relation to their peers. The lecturer's response hinted that at that time (first few weeks of the first semester), there were not many students who had made a similar request but promised redress (see DBP 45). The fact that black students who requested for extra tutorials on Excel practicals were in the majority affirms that they came from disadvantaged academic backgrounds with limited/ no access to computers. This historic disadvantage often detracted most PDS (blacks and coloureds) from full participation on Facebook discourses with higher achievers from privileged backgrounds. Consequently, this under privilege activated the emergence of differential participation and the rise of asymmetrical academic relations at the student level. Facebook provided an ideal space for informational support, lodging requests for additional tuition on challenging courses. The two sections above addressed the following question: *1.5.4. In what ways can SNS be used to scaffold student learning in university?*

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<sup>61</sup> While I do not intend to discuss students by identity descriptors, I only use these descriptors conveniently where applicable to demonstrate how academic histories' negatively or positively influenced student university learning.

<sup>62</sup> The fact that a few whites and Indians also requested extra lessons transformed my preconceptions that it was only Blacks who could be previously disadvantaged. It shows technology access/ digital divide as differential gradations of access and not only about those with or without access.

### 5.3.3. Exploratory talk

#### 5.3.3.1. Power contestations through logical critique

The 'safe,' mode of Facebook allowed students to openly critique the department's course administration process. The following wall discussion between the lecturer/online administrator and a student epitomises exploratory talk. While the student logically challenges a department practice (see WP 117) the lecturer constructively critique the student's views (see WP 113). As Mercer (1996) suggests in explorative talk, statements and suggestions are offered for joint consideration, with challenges and counter-challenges, but challenges are justified. The student contests the rationale of lecturers posting lecture slides weeks after a lecture. The premise of the critique is twofold: 1) That IS was a dynamic technological field and hence staff were expected to be leading edge in technology use, 2) Student quizzes were based on lecture notes provided in lectures the previous week. The lecturer's response acknowledges the student's concern, promises redress, before constructively critiquing her (WP 113).

Rival academic arguments about the provision of lecture material ahead of a lecture, are for example, low student turnouts for lectures. The lecturer's allusion to rival arguments (though unsubstantiated) suggests lecturer' shifting of student perspectives by training them that knowledge does not comprise absolute binaries (either or scenarios) but rather multiple realities. As such, the student's perspectives on knowledge as absolute, objective facts were presumably transformed by embracing the possibilities for multiple perspectives and realities about knowledge. This discussion addresses the question: *1.5.7. How are students' epistemic frames shifted by lecturer-student and student-peer interaction in SNS?* The open critique of a department practice by a student demonstrates the capacity of SNS interaction to subvert vertical relations of power and equalise lecturer and student access to knowledge claims. This critique supports claims about the power of CMC (Facebook) to democratise communication through filtering cues that denote social hierarchies (Short et al., 1976). This addresses the question: *1.5.3. In what ways do SNS subvert power relations and what are its subsequent effects on lecturer-student and student-peer interaction?*

### 5.3.3.2. Student as generators of personal knowledge

While there were few cases of exploratory talk, some whites<sup>63</sup> engaged in them. Exploratory talk resound student ability to self-reflect and self-regulate their cogitative processes. Students learn to negotiate and articulate logical arguments that are justifiable as their peers constructively critique them. One example of explorative talk is exemplified by white students' evaluative discussion on the academic worthiness of quizzes on the discussion board: (see DBP 21). Evans'<sup>64</sup> extract acknowledges that while multiple choice quizzes (MCQs) were a rational concept, the course was generally badly administered and he provides justifications for his position. This student's extract provides a snapshot of the limitations of the transmission pedagogy, namely, -over reliance on textbooks as authorial edicts for knowledge transmission, the decontextualised nature of the content taught that complicates application of procedural knowledge, and the focus on memorisation of concepts (rote learning). Rote learning is summarised in the statement: "*...they **rumbled on and it is impossible to remember everything they said.***" I argue that rote learning manifested in the memorisation of correct answers in quizzes. The transmission approach to teaching worked to undermine the creative power of students to engage in social constructivist construction of knowledge.

The above student's position that quizzes were a good concept stands in contrast with Hilary's views below (see DBP 19). Hillary's account counters Evans' hypothesis (that quizzes were useful) by noting that '*it sucked*' and accounts for her stance- the huge chunk of questions asked did not draw on the syllabus, tutors struggled to help the students, and learning management system (Vula) was offline occasionally. The difference between Evans and Hillary's assertions is that while Evans feels that the IS MCQs were overall an effective concept for cognitive scaffolding and progressive assessment of student understanding, its administration process was faulty. Hillary instead is utterly sceptical about the idea but also provides logical justifications for her views. Govan holds an alternative view (see DBP 20). Govan supports Evans's perspective that MCQ was a useful intervention, worth emulating by other departments. He transcends Evans' assertions about the worthiness of MCQs by suggesting amends, namely, messages on the computer log-on screen hinting the quiz topics

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<sup>63</sup> This should not be misinterpreted to mean that whites have a higher intelligent quotient than any other race or that whites have a stronger inclination towards exploratory talk than other genres of talk. Rather, it is an acknowledgement that although there was a general paucity of explorative talk, some nascent cases of it was evident among a few discussants who happened to be white.

<sup>64</sup> Pseudonym for this student.

being tested. Exploratory talk demonstrates how discursive practices are precursors for generating new knowledge. By making rational assertions and developing justifiable counter propositions, students become co-participants in social constructivist construction of knowledge.

The fact that no black or coloured<sup>65</sup> students participated in peer-based conversations of this argumentative nature (in public Facebook spaces)<sup>66</sup> despite Facebook appropriation to assist them is surprising. It seems suggestive of their limited public communicative competence as second English language learners, and their inability to take full advantage of technological resources due to disadvantaged ICT backgrounds. As Fuller, Unwin, Felstead, Jewson and Kakavelakis (2007) suggest, individuals differ in the extent to which they engage in learning and their responses to [learning] opportunities are shaped, at least to some degree, by their personal backgrounds, prior educational experiences, and aspirations, which is their 'learning territory' (Fuller & Unwin, 2004).

It seems many students underutilised their academic potential by not exploiting inter-cultural and racial networks. The above discussion supports previous research that reports that SNS (Facebook) is oriented towards weak [academic] ties or bridging capital (Ellison et al., 2006). The empirical evidence in this section on the challenges of transmission approach to pedagogy: (over reliance on textbook as authoritative edicts of knowledge that limit personal knowledge generation (see DBP 80), lecturer's dissemination approach with limited emphasis on concepts and issues of essence, provision of less authentic context-free knowledge, limited experiential learning) addresses this question: *1.5.2. How do peer-based academic support structures using SNS provide insights into the problem of lecturer-student relation?*

### 5.3.4. Discrete talk and interactional dynamics

#### 5.3.4.1. Transmission medium of 'pedagogical knowledge'

Apart from cumulative talk, another talk genre that dominated Facebook interactional spaces is *discrete talk*. Discrete talk is characterised by disconnected, standalone bits of texts lacking

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<sup>65</sup> It is important to be mindful of the fact that the ADP class comprised mainly black and coloured students who were PDS. Many of these students had limited to virtually no prior experience and exposure to computers in their high school.

<sup>66</sup> This was noticeable given the fact that students were required to use their authentic names and in most cases they had their authentic profiles and personal photos on. Many students also self professed their racial identity and did not put privacy settings on and so their profiles could be accessed by anyone within the IS group.

the fluency characteristic of conversations. One example of discrete talk in the administrator's inbox is given: (see IP 112). The student makes an inquiry on what system and system thinking are from the lecturer. The lecturer responded with a detailed elaboration of the concepts (see IP 110). In between this conversation, and adjacent it emerge completely separate, different discussions between the same administrator and another students (see IP 108). This query and the lecturer's response constitute a separate, unrelated discussion that appear in juxtaposition with other discussions (see IP 109, IP 111). These conversations are unrelated and hence constitute standalone texts that convey different messages and represent different communicative events. The issue is that students seemed to depend more on the lecturer as a source of information than on their peers. Lankshear, Michael and Knobel (2000) note that for some learners, the Internet can seemingly be understood as an infrastructure for transmitting, receiving, and manipulation of information. Drawing on this, some students could have conceived Facebook as nothing more than a space for the appropriation of teacher-generated content and not peer-based dialogue. This discussion answers Research question: 1.5.4.

### **5.3.5. Racialised posts**

#### **5.3.5.1. Homophilous interactions**

Sometimes the Facebook discursive styles tended to be 'racialised' with students responding to questions posted by peers of the own colour. These racial clusters although not a distinct phenomenon that defined interactions, had spontaneous occurrences. A typical case of racialised relations is a conversation among white male students on why few students take IS as their major course (see DBP 2). The response by another white male student demonstrates an attempt to downplay the essence of other courses and subtly elevate IS' academic currency (DBP 3). The other white male supports the second student claiming that IS is hard and they seek for easier courses (see DBP 4).

The tendency to engage with topics or reinforce the opinion raised by peers of similar colour was also discernible among some black students. One black female student responded to a topic initiated by black female peer (see DBP 14, and DBP 15). This tendency to respond and/ reinforce the opinions of peers of similar racial identity denotes some subtle forms of homophilous tendencies by students. Homophilous theory suggests that people with similar

backgrounds—that is, similar socio-demographic, behavioural, and intrapersonal characteristics tend to have homogenously-composed individual personal network structures (McPherson, Smith-Lovin & Cook, 2001). Therefore, students of the same race, or who came from the same high school, suburb often connected to one another because of mutual interests and shared history. These nascent forms of interactions had potential to scaffold learning if they were more theory/task oriented. This addresses the question: *1.5.4. In what ways can SNS be used to scaffold student learning in university?*

## **5.4. Critical Theory of Technology (CTT)**

### **5.4.1. Lack of a theory of emancipation**

While CTT is useful for exposing forms of technological domination, this philosophy lacks a logically enforceable theory of human emancipation from domination by technology. The political struggles emphasised in literature concentrate on software system design and implementation, user interface design (Markus, 1983; Latour, 1993) and seem to ignore power struggles that unfold at interactional plane (technology-mediated interaction) and the psychological level (mind control). In her discussion of causes of resistance to IS implementation, Markus suggests that resistance was explained:

as a product of other interaction of the systems design features with intra-organisational distribution of power, defined either objectively in terms of horizontal or vertical dimensions, or subjectively, in terms of symbolism (Markus, 1983, p. 432).

I infer from the above that even when power struggles (as a basis for human emancipation) are discussed in IS implementation, the focus tends to be technocratic, especially on technical features, with limited emphasis on the social interactional dynamics themselves. Therefore, analysis remains conceptual and lacked a practically grounded theory of emancipation that penetrates the micro-level, human side of the interactions. This emphasis on technical affordances of IS implementation is embodied in the course convenor's explication of the academic value of Vula as a LMS (see LB. 11 in the Appendix A).

### **5.4.2. Inadequate conceptualisation of power**

Theories of CMC (that draw on CTT) fail to adequately conceptualise power struggles beyond assertions made about CMC as a medium with potential to 'democratise' communication (Kiesler et al., 1984, Short et al., 1976). As Herring (2001, p. 2) suggests, the



first wave of computer mediated discourse (CMD) failed to distinguish among different types and uses of CMD and called for “computer mediated language and interaction to be sensitive to a variety of technical and situational factors, making it far more complex and variable than envisioned by earlier descriptions.” It is light of this argument on contextualisation and the limited engagement with power at an interactional (social) and inter-mental plane (psychological) that I find theories of CMD wanting. My view is that through examining text-mediated discourses, opportunities for transcending communication and ‘media effects’ in discourses are created. CMC theorisation on power can benefit from CDA. It is light of this deconstruction of discourse that the negotiation and contestation of power can be comprehended. In the following sections therefore, I employ CDA to examine hierarchical (lecturer-student) and horizontal (peer-based) relations of power (academic relations) in the three Facebook spaces.

### ***5.5. Analysis of power manifested in discourse***

Fairclough suggest that power manifests ‘behind’ discourse through efforts to standardise language forms or impose specific language formats and this limits who speaks, who is heard, and about what (Fairclough, 1989). Consistent with Fairclough’s (1989) three dimensional hierarchy of description, interpretation, and explanation, I examined power relations in Facebook discourses. I also employ additional analytical tools Fairclough (1989) uses in relation to language (see 4.8.2).

Table 5.2: Analysis of interactional power using Fairclough's (1989) CDA

Text (posts)	Description	Interpretation	Explanation
Mandla: <b>hey</b> Theron I'm Mandla from one of your classes.	'Hey' is informal. Lecturer is addressed by first name instead of the title.	Use of informal language is expressive and relational. It portrays the student attempt to level relations of power.	Lecturer-student online relations are purportedly symmetrical. Facebook allows students to negotiate power through addressivity.
I asked you for that Cape Town picture remember? <b>So</b> <b>please make it a</b> <b>point that you</b> <b>bring it on your</b> <b>flesh</b> [flash] drive tomorrow at the tutorial, thank you!!! (IP 128)	' <i>Make it a point</i> ' resonates the student interest to impose control.	Student manipulates lecturer's promise into an obligation. He imposes a directive the lecturer has to honour.	In educational contexts, lecturer-student relations are expected to be hierarchical. The informal nature of Facebook gives the student the leeway to subvert these power relations.
<b>Administrator's</b> <b>response</b> Hi, Mandla <b>you</b> <b>must</b> learn to write politely otherwise <b>you will not</b> be able to get what you want in future. Theron (IP 129)	" <i>must</i> " is a modal auxiliary. It is expressive of relational authority of the lecturer.  ' <i>will not</i> ' is definitive	The implicit rule is the use of polite language when inquiring from a superior	The African culture imposes expectations that the young should treat the old with dignity and respect. In academic contexts, lecturers also expect the same from their students.

### 5.5.1. Findings on relational power in Inbox, wall, and discussion board posting

For the three interactional spaces, similar discursive practices were applied that demonstrated assumptions about teacher authority, though there were few cases where the students contested power. I will therefore present these issues thematically rather than discuss contents of each interactive space in turn for the sake of limited space.

## 5.5.2. Contesting hierarchical power

### 5.5.2.1. Appropriation of Imperatives to wrestle social power

Students wrote imperative statements meant to consolidate power in this ‘student controlled’ space. A typical case of this power struggle is the aforementioned case in table 5.2 (see IP. 128). The lecturer is addressed by the first name (text property) and not the title as is normally the case in face-to-face contact. This addressivity has relational significance, as it portrays the power agent (student) in a relationship of implicit power sharing with lecturer (interpretation).

The student employs an imperative phrase ‘*make it a point that*’ as a way of territorialising control. As Foucault (2003) reiterates, power relations are exercised through the production and exchange of signs and they are scarcely separated from goal directed activities that permit the exercise of power (process of domination, the means by which obedience is obtained). I interpret signs as human intentions and therefore, the student in his negotiation of power intends to secure the compliance of the lecturer with his cause. In response, the lecturer lashes at the overt challenge to her authority and demands the student to behave: ‘*you must* learn to ask politely otherwise, *you will not* ...’ (see IP 129). This lecturer’s challenge to the contestation of power by the student is an affirmation of dispositional power and serves to reterritorialising her control.

### 5.5.2.2. Satirical critique of administrative practices

Some students used political satire to express their displeasure with the department’s requirement for first year students to open Facebook accounts and join the department Facebook group. Students felt compelled to sign up and wrote satirical comments: (see WP 149). This student is sceptical about academic use of Facebook by UCT students whom she conceives as African elites. Where power relations are assumed to be hierarchical, the strategic use of language (like rhetoric) to express displeasure seems an effective way of articulating complaints than direct confrontation. Other students emulated this satirical critique (see WP 141, WP 130). These comments were a diplomatic way of sensitizing administration of controversial issues without fear of academic sanction. The fact that academics sometimes deliberately explained in class the academic value of Facebook consultation (see third extract in Section 6.5.3.2) suggests that they heeded to these complaints. A more scathing critique is adopted by another student who seems unapologetic (WP 139). The student seems disappointed in the perceived inaccessibility of lecturers in the

department in spite of students' need for assistance. The use of the vernacular terms like *Vula* [open] and *Vala* [close] is intended to veneer the sharp critique with euphemism.

### 5.5.3. The 'exhibitionist' attitude of male posts- Shifts in horizontal power

Male students posted messages on the wall that were expressively chauvinist. Once posted, wall posts become publicly available to all Facebook group members. This could have boosted the self-esteem of some male students who craved publicity among peers and females by exhibiting their macho. Some such 'exhibitionist' statements displayed on the wall is this (see WP 134). This egoism also seems salient in the following wall post (see WP 135). The conversational nature of this posting hints to self expression amid a watching audience, then an emoticon<sup>67</sup>) signifies a subtle commitment to be heard. Their purpose seemed to be the articulation and public 'performance' of maleness as an identity and the deliberate orchestration of its prominence.

### 5.5.4. Vertical power

#### 5.5.4.1. Modality and lecturer's dispositional power

At the text property level (description), the use of auxiliary modes in Facebook discourses demonstrates the lecturer's deliberate calculation to control the student actions. Auxiliary modes like 'must,' and 'will have,' in support of given directives/ guidelines is summative of her intentions to exercise dispositional authority and control. My interpretation is that in academic settings, the hierarchical authority of the academic imposes the implicit rule that students should use polite language when inquiring from a superior. At the social structure level (explanation), cultural norms and expectations of the African society emphasise respect and dignity for the older people and these values are replicated in university where lecturers expect the same from their students. This expectation for recognition of authority and respect resonates with Carspecken (1996) conception of normative authority where power is derived from conventions of a given culture.

An example of the lecturer's use of auxiliary mode involves a student making an enquiry on changing an assigned topic (see IP 33). In her response, the lecturer employs a modal auxiliary: (see IP 35). The subtle forms of control unfold in a social context (explanation) which affords the lecturer as an expert, the status to guide and academically support students with academic queries. The inquiry by the students communicates an information gap that need to be filled and the legitimate expectation that the lecturer can support the student

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<sup>67</sup>Emoticons are icon-like features meant to show the feeling and mood of online participants.

(interpretation). The textual property of the lecturer's response (description) embodies a modal auxiliary 'will have' that encodes an air of authority in the lecturer to give expert guidance and a definitive course of action.

#### **5.5.4.2. Normative authority**

As Carspecken (1996) observes in the case of normative authority, it is obvious that the norms consented will be the features of culture. The culture of respect, often nurtured in the S.A. English high school system where titles are used to address teachers, takes different forms in university. One such manifests in lecturers' use of imperatives when addressing student queries. The student asks the question: (see WP 46) and the lecturers responds with a modal auxiliary (see WP 44). At text property level (description), the use of a modal auxiliary '*should*' invokes authorial claims of the lecturer over the student. The auxiliary mode's effect (interpretation) is to sediment the lecturer's control of who speaks, whose perspective is heard and under what circumstances. The dispositional power of the lecturer as an expert in this discipline and her embodiment of 'pedagogical content knowledge' legitimise her to act as an academic advisor and provide authoritative direction.

#### **5.5.4.3. Authorial claims**

In lecturer-student communicative events, the lecturer employed words and phrases whose relational and expressive tones carried authorial connotations. Below are discussion board extracts of phrases that resonate with the lecturer's legitimate authority over students. (see DBP 100 and DBP 105 in the Appendix B). The student inquires from the lecturer about her correct chapter and the lecturer responds with an authorial statement "...*stick to that*" (DBP 105). The phrase has '*psychological authority*' over the student and instantiates vertical power relations at lecturer-peer level. Psychological authority has to do with the way the text establishes its functional authority over the reader, and the degree to which the reader buys in to the story (Bal, 1998).

#### **5.5.5. Possibilities for personal agency**

Grammatical features can embody agency (positive/negative) as manifested in sentence construction, syntaxes and verbs used. To this end, the lecturer also employed permissive modalities like 'may,' and 'can.' In the extract a student asks a procedural question to generate understanding of the technical processes to be taken: (see IP 40). The lecturer responds with a possibility mode ('you *can*') and a liberal phrase aimed at providing the student with greater leverage for independent action (see IP 41). Therefore, interactive power

can also be conceived as a productive force that directs action to accomplish certain learning goals. This augurs with Clegg's (1989) facilitative power, that understands it in terms of its ability to produce and achieve collective goals, and characterised by a nonzero sum game. Thus, power is not necessarily a restraining force and exclusive resource in the hands of privileged elites. It can therefore be suggested that the use of modal verbs as 'may' and 'can' provide scope for conditioned agency in student task accomplishment.

University of Cape Town

## CHAPTER 6

# Analysis of Learning and Power in Activity Systems and Human discourses

### 6. 1 Introduction

In the previous section, I examined learning and interactional power in and ‘behind’ text-mediated discourses between lecturers and students. In this section, I discuss the learning and power relations that obtained in face-to-face lecturer-student and student-peer interaction, and the influence of Facebook on classroom activities. The latter is critical to understand given that interaction on Facebook was integrated into classroom practices.<sup>68</sup> Facebook was officially sanctioned space for academic consultation.

To investigate the above, I use the transcripts of my in-class observations, transcripts of lecturer and student interviews, and post-observation debriefings I occasionally had with one case study lecturer after observing her classes. This multi-method approach is consistent with Russell and Schneiderheinze’s (2005) Activity Theory (AT) analytical framework I adopted (see Section 4.5.4). The objective of this Chapter is to unravel: 1). How learning unfolded in lectures and how interactional power was manifested and contested in classrooms, 2) What influence Facebook had on identity construction and /articulation, on in-class learning and configurations of power.

### 6.2. Power in structural and context influenced activity systems and human discourses

The common attribute in CTP and CHAT is the acknowledgement by both theories that socio-cultural and historical circumstances influence human interactions and psychological functioning. For example, historically derived privileges like attendance of privileged English speaking schools, advantaged schools with quality instruction, and privileged home backgrounds may work in university as cognitive resources PAS could exploit to excel in learning and to assume superior academic status over PDS. Rose observes in relation to S.A. post apartheid schooling system that:

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<sup>68</sup> The case study examined both PDS (ADP students) and PAS (from mainstream class) because (1) The discussions on the three Facebook spaces involved both classes combined, (2). Socio-historically induced differential participation (online and classrooms) would be ascertained more coherently when PDS experiences were related to PAS’.

The dominant moral order in our classrooms is one of inequality. Teachers are confronted by this inequality from the day we first walk into a classroom, ill-prepared by our training to manage it, let alone overcome it. [...] minority of learners are consistently able to actively engage in classroom activities, to respond successfully to teacher questions (the primary means by which we interact with our students), and to succeed in assessment tasks [...] (Rose, 2005, p. 132-133).

I infer that students' differing capacities to take full advantage of learning opportunities provided and variations in cognitive work to reinforce unbalanced academic relations that may cause differentiation in student learning outcomes.

### **6.2.1. Cultural Historical Activity Theory-a dead end for conceptualising interactional power**

While CHAT is a useful theory for analysing the influence of structural forces on meaningful academic interaction, the theory is limited with regards operationalising relational power. As Toomela (2008) contends, one weakness of Activity Theory is that its focus on activities ignores an important aspect of the human mind: that is, externally the same behaviour can emerge from qualitatively different mental operations. To the extent that I have articulated power as both psychological (cognitive) and social (interactional), there is need to access interactants' mental schemas, which CHAT insufficiently does. The epistemological complexity of accessing mental structures is alluded to in the online administrator's extract- *'they do not know even what I will be thinking'* (see second part of LA. 1).

The lecturer explains why students prefer online consultation to consulting with her face-to-face. Although the discussion is cast in social presence theory where CMC allows the depersonalisation of communication, it also expresses the epistemological complexity of accessing and examining mental structures (or epistemic frames). While the lecturer's statement seems to suggest that with FTF interaction one's mind can be 'read through,' I contend that the human mind is more complex to be analysed solely by observation. Conscious of the methodological limitations of exploring activity (learning and academic relations) through direct observation, I adopted a multi-pronged approach that integrated observations with interviews, and post interview debriefings to interrogate interactional power and learning. Multi-pronged approach denotes that I drew on multiple sources which individually, had multiple facets. For example, my online ethnography included inter alia, the following: direct online observation of student interaction on Facebook collaborative spaces,



participant observation-where I posted topics and invited student discussions around them, and online data mining. My interviews comprised in-depth opening interviews, in-depth follow-up interviews and closing interviews and my research subjects involved both academics and students.

As Toomela (2008) elaborates, holistic theoretical analysis (that CHAT seems to ignore) which takes into account all important aspects of cultural psychology theory, would lead to rejection of the micro–macro opposition. Methodologically therefore, while CHAT could be a productive theory for exposing the role of social structure on psychological functioning (learning and cognitive growth), it is less explicit in its engagement with issues of power. To complement CHAT in this limitation, and mindful of the interactional nature of power (see Brey, 2008 in Section 3.3), I propose that power relations (academic relations) operate at every node of the activity systems, and one or more power strategies could be operational at one. I am influenced CTP at micro-level (Gowe, 2002; Carspecken, 1996) to explore how power is negotiated and contested in classrooms (lecturer-student, student-peer)<sup>69</sup> and Facebook’s influence on classroom interaction. I therefore, use CHAT to examine teaching and learning in technology mediated interaction, and Gowe (2002) and Carspecken’s (1996) conceptions of power to plug the limitations of CHAT’s minimalist perspective on power.<sup>70</sup>

### **6.2.2. Understanding lectures as activity systems**

In this section, I examine the lecturer-student in-class interactions and how Facebook interactions affected classroom<sup>71</sup> activities. To do this I:

- Use the CHAT framework to interrogate, the elements of the lecture activity system, and activity contradictions as forces for change in student learning and lecturers’ teaching practices.
- Analyse, using Carspecken (1996) and Gowe’s (1995) analytical framework, the power relations that emerged from the interaction of lecturers, students and their peers in classrooms and Facebook’s influence on them.

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<sup>69</sup> It was observed that no tutor for this ICT course interacted with students on Facebook. Additionally, during task executions (the only time students were helped by tutors), students were not allowed to be on Facebook during this time.

<sup>70</sup> I briefly discussed this in section on the history of CHAT (see section 4.2.6.2).

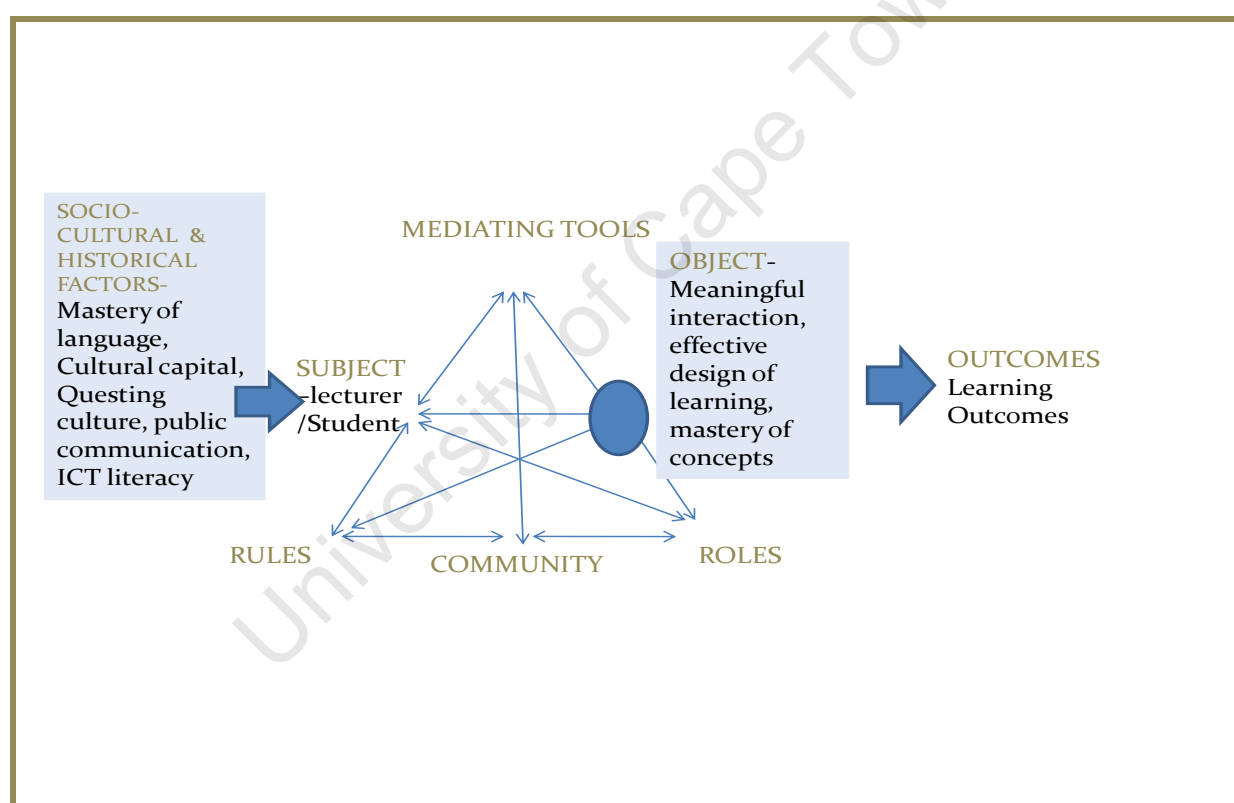
<sup>71</sup> Classes described here comprise 1 ADP class and a Mainstream class split into two separate classes. All these classes were taught the same content, except that the ADP was an extended programme that ran for two semesters.

## 6.3. Findings

### 6.3. 1. The activity of interest

Roth (2007, p. 88) notes that the term activity “denotes societal, cultural-historically developed forms of contributing to the satisfaction of collective needs.” Activity therefore, involves goal oriented actions and behaviour in context often mediated by tools, rules and division of labour. When teaching and learning Microsoft Access/Excel<sup>72</sup>, is conceived as an activity of interest for this ICT course, the focus shifts from examining rote participation in mundane tasks to understanding the structural forces that support/constrain the subject’s goal directed action. Figure 6.1 below summarises the object and structural factors (socio-cultural and historical) involved in Teaching and learning of Access/ Excel in class as an activity.

**Figure 6. 1: Teaching and learning Microsoft Access/ Excel as Activity of interest**



For the lecturer, the learning object was the design and delivery of an effective learning model, meaningful interaction with students, and student mastery of technical and practical concepts of the ICT course. Yet the multicultural classes taught comprised students with varying levels of cognitive development given the different levels of English language of

<sup>72</sup> This ICT course involved the teaching of ICT theories concepts, theories and issues. These were embodied in two main subjects: Access and Excel, in addition to other one-off topics like database management and the Internet.

mastery (English), their ability to ask rational questions, ability to communicate their needs and varied levels of ICT literacy. Unbalanced student-peer relations manifested in some PDS' limited exploitation of the learning opportunities provided in class due to their coyness (shyness and reserved) and limited capacity to engage with students from other racial groups. As one PDS noted in relation to her friendship networks:

My classroom friends are black partly because I am a bit reserved, and because I was mainly socialised to black friends. *It's very difficult for me to adjust to understand and interact with these coloureds, whites and Indians because I am not used to it and we don't share the same interests. So we fail to connect because we have different problems, different interests and we see things differently. [...]* (Interview 19/09/08).

Therefore, skewed student-peer academic relations in classrooms were activated by some PDS' limited communicative and cultural competence as they failed to broaden their classroom networks across races.

Facebook played a crucial complementary role to classroom learning as it scaffolded students with information needs. Students engaged in dialogic conversations with peers (though very limited in public spaces) and shared academic and social resources (see LB 2 and 3 in the Appendix A). Some PDS did not use Facebook despite its provision as a student consultative tool. As one PDS remarked:

I use yahoo and SMSs.<sup>73</sup> I only do things based on need and therefore I will not go for MySpace and Facebook because I am content with the ones I use. *I am also conservative with respect to the new things that come, because I can't follow every new thing that comes.* After all, I am not that far backward anyway (Interview 17/09/08).

Although this PDS cites contentment as the reason for lack of exploration with SNS, it seemed limited ICT literacy was the major cause. When quizzed about her access to computers in high school, limited ICT literacy surfaced:

*I only started to use the internet when I came to university. My sister actually opened an e-mail account for me and I had no idea how to use it. Literally, I was stranded [...]* (Interview 17/09/08).

Limited ICT competence thus often stood in the way of student effective use of the learning opportunities that lecturers provided in class and online for student learning.

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<sup>73</sup> SMSs means short message service.

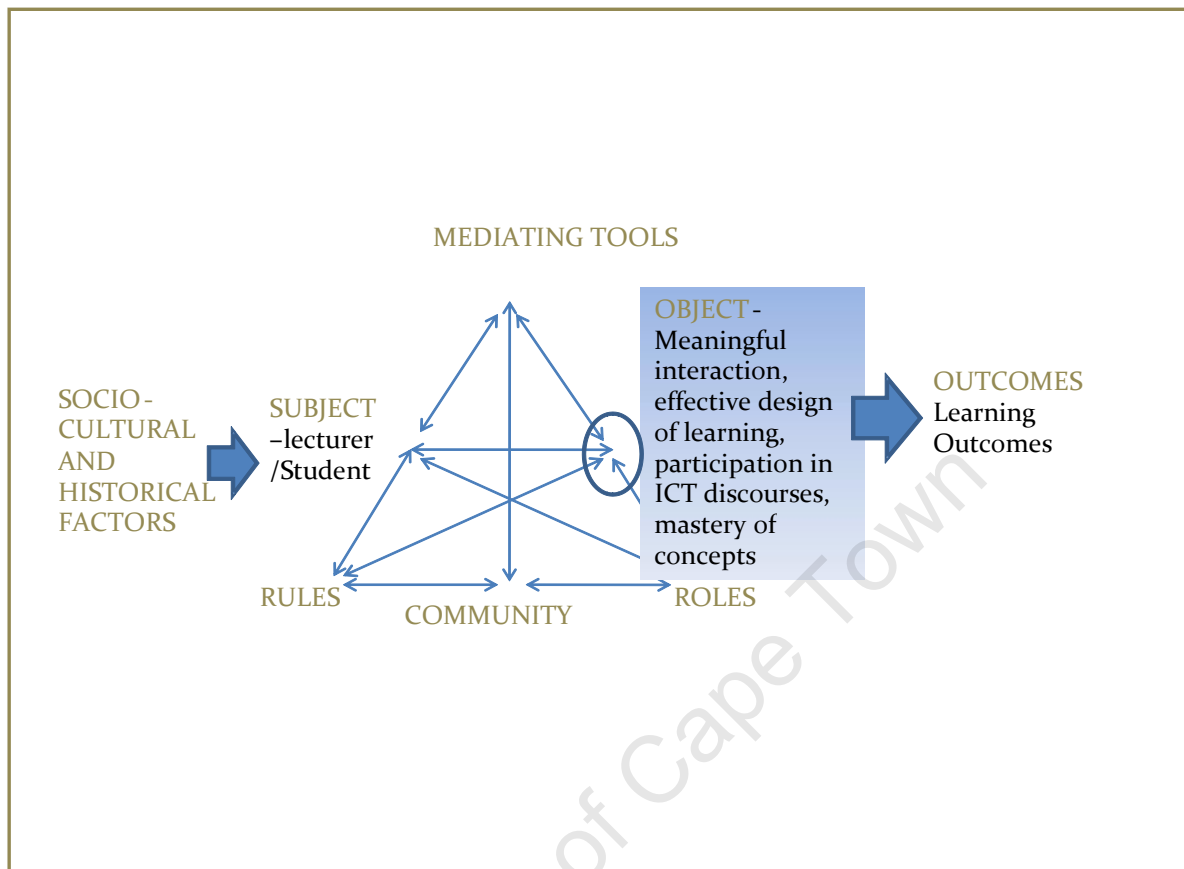
### 6.3.2. Object of activity

The object denotes the goal directed nature of human consciousness. Roth and Lee (2006) contend that the object/motive of an activity is realized through a series of goal-directed actions and underscores that goals are formulated precisely in the service of realizing activities (Ibid). I interpreted the objects of teaching and learning of Access and Excel (the activity) as:

- Effective design of learning (interaction style, pedagogical mode, structure of content) by the lecturer.
- Meaningful interaction in class (and drawing upon Facebook) that familiarises students with the IS discipline's knowledge.
- The mastery of Excel and Access theoretical and practical concepts in IS discourses.
- Engaging students in ICT discourses that immerse them in IS knowledge construction and knowledge communities.

Each class session contributed to any one or a combination of these objects. In Figure 6.2, I provides a diagrammatic representation of the object of an IS lecture.

**Figure 6. 2: The learning objects in teaching Access/Excel in a multimedia environment**



The object highlighted above is affected by an interplay of the individual and collective (rules, community and roles) mediating factors that are at play in the classroom and the structural factors cited in Figure 6.1. The ability of lecturers to articulate the learning objects clearly is important in light of these confounding factors. This is important for student learning given that students with limited ‘prior mediated learning experiences’<sup>74</sup> (MLE) (Feuerstein et al., 1980) often have a tendency to conflate the object of learning with the materials used to achieve it leading learning goal displacement. Hence ‘intentionality’ in MLE (Feuerstein et al., 1980), in this case-lecturer’s organisation of learning using multimedia technology, is critical to student mediated learning.

<sup>74</sup> “The purpose of mediated learning experiences (MLE) is to create cognitive prerequisites essential for successful direct learning” (Feuerstein et al., 1980 cited in Kozulin, 2003, p. 26). It involves mediation of meaning, transcendence, and intentionality (ibid).

Table 6.1: The object of interest

Element of Activity	Extracts of observation transcripts	Researcher's comments
Object of activity	<i>We are trying to create a database, which captures the following information.</i> When you are given a story like this <i>as you are going to be given in the exam</i> [...] (Observation transcript 23/04/08).	1. Database development is the object of the lecture.  2. Application of lecture content as a basis for exam preparation.

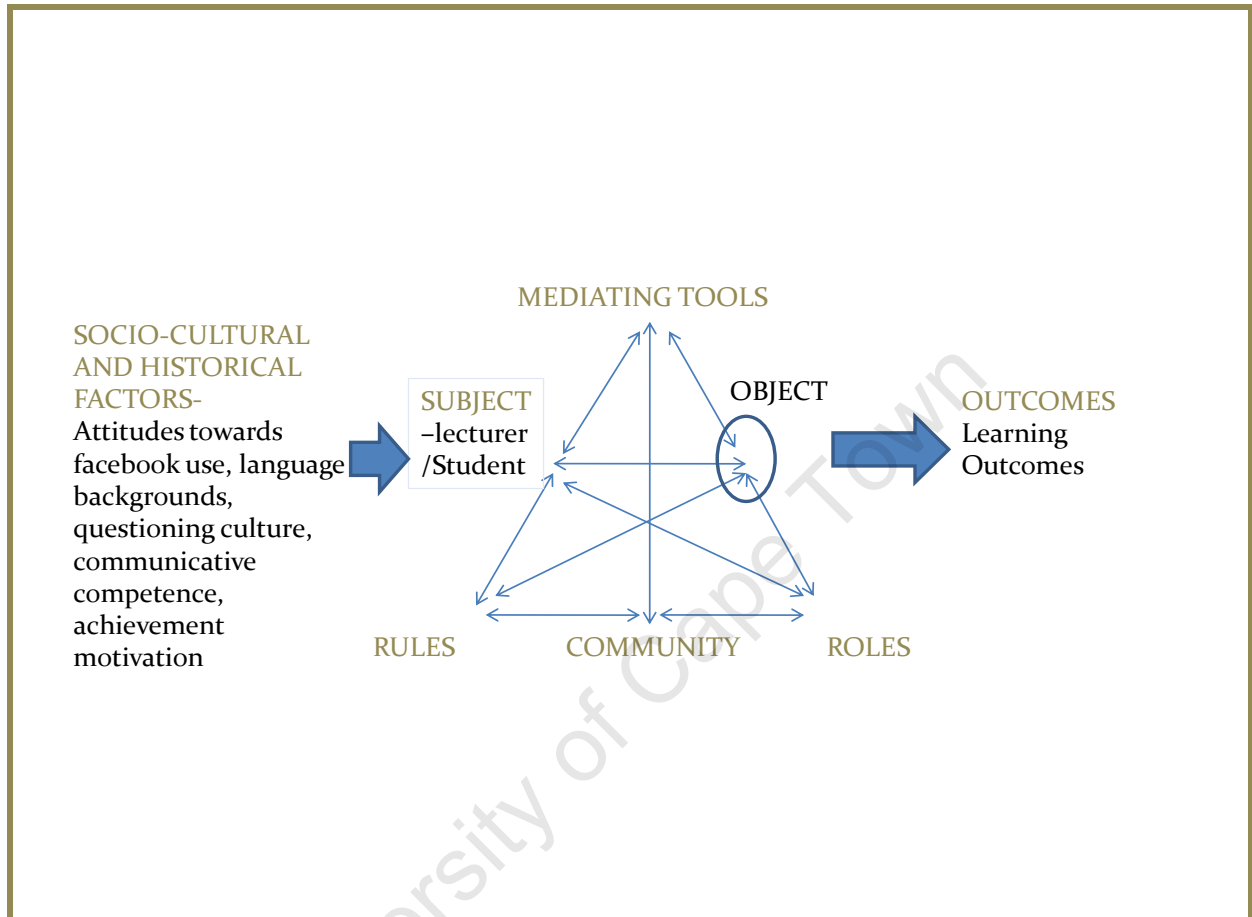
In the extract in Table 6.1 above, the lecturer cites development of a database as the main object of the lecture. Because regular and guest lecturers taught different aspects of Excel and Access, each lecturer needed to define the object of their lecture to avoid confusing students. As prerequisites for exam preparation, students were often required to master technical concepts (like aforementioned creation of a database). They were also encouraged to access answers to their questions on Facebook as ways of connecting classroom practice with online learning practices. Therefore, ‘informing’ students about future tasks recruited their attention and activated their mental preparation for them, thus constituted scaffolding. This answers the question: 1.5.4. *In what ways can SNS be used to scaffold student learning in university?*

Power relations were formulated in the interaction of students and academics in classes as they strived to achieve their learning objects. As Gowe suggests, the kind of knowledge produced in pedagogy interacts with the location of the site and the techniques of power employed there. Institutional sites are strongly characterised by techniques of power that have a more directly corporeal effect, what she calls “more corporeal configuration of techniques, that is, distribution, surveillance and regulation” (Gowe, 2002, p. 7). To the extent that learning objects were sometimes unclear given the vagueness of some lectures (see DBP 21), lecture discourses were often normalising through their impositions of mind control on students.

### 6.3.3. Subjects of activity

First year IS students and their lecturers constitute the subjects of the activity (See Figure 6.3)

**Figure 6. 3: Subjects of Activity**



IS lecturers and students were the subjects of the activity and had different learning experiences and conceptions about learning in class and on Facebook. These diverse conceptions were a product of broad structural factors (see Figure 6.3) and other immediate contextual factors like the design of instruction. For example, while Facebook was integrated into classroom learning as an official consultation space, students had different notions of the academic value of Facebook as shown in interview extracts below:

Table 6.2: Subject of Activity

Element of Activity	Extracts of interview transcripts	Researcher's comments
Subject of activity Student X <sup>75</sup>	<i>I have never shared any information on the department Facebook group. I haven't posted anything there. It was just a departmental requirement</i> (Interview 8/05/08).	1. Student scepticism about Facebook as a departmental imperative 2. Does not conceive it as serving any academic purpose
Student Y	<i>I haven't posted anything there [...] I don't know if students are taking it [Facebook] seriously because everyone is up for these social applications and I have not seen anyone who used it positively</i> (Interview 14/04/08).	1. Social networking is not conceived as learning. 2. Facebook 'flippant' use by peers shapes negative perceptions.
Student Z	<i>I use Facebook to interact with IS online course administrator. <b>If I do not understand any material discussed in the lecture then I discuss it with her. [...] Students also comment if I have a problem [...] so I get to speak to more people and get more solutions to a problem</b></i> (Interview 8/04/08)	Facebook 1. Complements classroom learning, 2. Supports collective generation of resources and information support

The different perceptions students had on Facebook potentially affected their learning activities online. The sceptical mindsets (Student X and Y) compromised productive use of Facebook while those who saw it as a productive academic resource (like Student Z) used it for online consultation, collective generation of resources and peer-based academic support. These different orientations towards Facebook use invariably became a source of skewed academic relations between learners, as students were differentially positioned in terms of access to information resources from peers and academics on Facebook. As Carspecken (1996) suggests, interactional power relations occur when actors are differentiated in terms of who has most say in determining the course of an interaction and whose definition of interaction setting holds sway. In view of the porosity of the boundaries between Facebook interactions and in-class learning, students who sought further clarity in class on questions they asked online, became strategically positioned to influence the knowledge claims of others because they became comparatively more informed. *The above discussion addresses the question: 1.5.1. How does social (lecturer-student, student-peer) interaction on SNS*

<sup>75</sup> Student X was a PDS.



(Facebook) illuminate understanding of the academic relations and learning nurtured in formal settings (classrooms)?

Students' varied dispositions towards Facebook use manifested in their preferences for different Facebook spaces. The timid, reserved nature of some PDS manifests in their uncommunicative nature in class and their preference for private consultations with the lecturer via her private inbox:

***I do not normally ask questions in class. I am very shy<sup>76</sup> [...]. I would rather send her [lecturer] a message on Facebook inbox than go to see her. You know when I ask a stupid question I don't want to see on her face that she is saying, "It is a silly question!" [...]. She should just answer that. If it is silly fine, but she should answer it*** (Interview 8/04/08).

The above suggests that in face-to-face contacts, power was made more explicit through facial expressions and body language when the lecturer discredited a student's question as ridiculous. The equalisation effect of Facebook interaction on lecturer-student power dynamics is therefore demonstrated by the greater leverage this introvert commands online to get her query answered, the ***"If it is silly fine, but she should answer it"*** statement. This resonates with Carspecken's (1996, p. 133) view on academic power struggles expressed in student "refusal to accept [lecturer's] normative claim to power" as "legitimate occurrences that take place within their definition of the setting." The student, thus defines the interactional setting on her own terms that the lecturer is obliged to comply with. Facebook hence disrupts this hierarchical power relationship by allowing the student to overcome differential status barriers to recruit a response online, that would otherwise be impossible facially in class. The above discussion addresses the question: *1.5.3. In what ways do SNS subvert power relations and what are its subsequent effects on lecturer-student and student-peer interaction?*

Yet other students transcended private conversations by interacting on Facebook public spaces:

***We use the [IS Facebook] group to send questions and also to read other students' questions and the responses they got from the administrator [...] and getting the information from there [...]. At times it is about knowing how other people are thinking, and questioning myself whether I am also thinking in that direction [...]*** (Interview 25/03/08).

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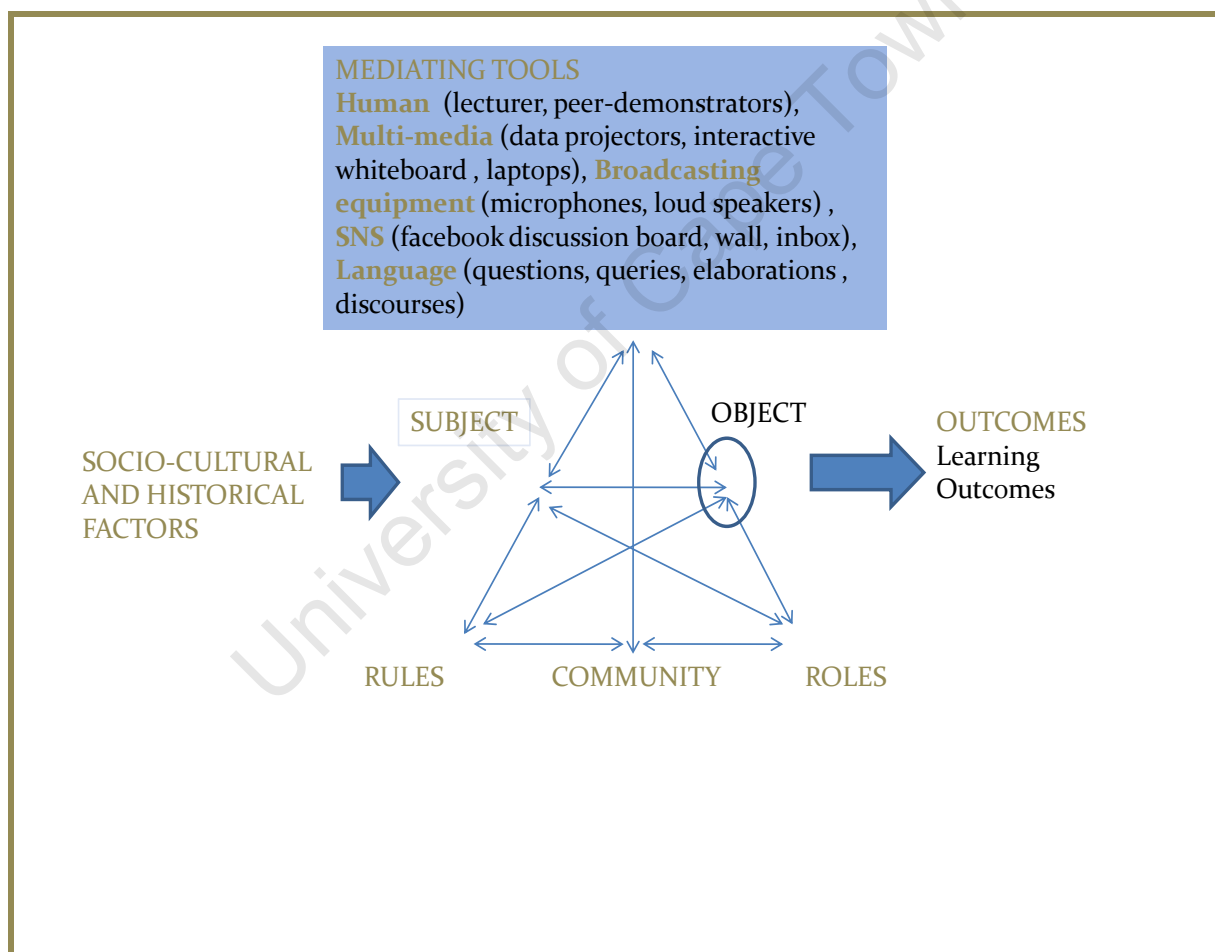
<sup>76</sup> The shyness of some PDS resonates with my argument about the sense of powerlessness such students suffered as they interact with lecturers and some PAS in university.

In the above, the collaborative discourse by the student serves many scaffolding purposes: ‘question-based consultation’ (Ng’ambi, 2004) with the lecturer, using peers’ questions and answers as epistemic ‘lenses’ for self assessment and accessing information. The latter is embodied in the statement: “*...questioning myself whether I am also thinking in that direction.*” This way students learned through active reflection on peers’ questions and reading lecturer’s elaborations on their questions. This section addresses the question: 1.5.4. *In what ways can SNS be used to scaffold student learning in university?*

### 6.3.4. Influence of artefacts on mediating activity

#### 6.3.4.1. Technological tools

Figure 6. 4: Tools mediating learning of Access and Excel



Because of large classes (about 450 students per session in Mainstream classes), a range of instructional tools were employed in teaching and learning Access and Excel (see Figure 6.4). While broadcasting equipment ensured efficient content transmission in large classes, paradoxically, it reinforced unbalanced academic relations in the lecturer's favour. Some students' voices were often muted, as they needed a microphone (just like the lecturers) to engage with lecturers or other peers. One lecturer acknowledged this in an interview, (see LD. 4). This discouragement from asking questions in class is a normalising technique of power. As Gowe (2002) suggests power relations of pedagogy are normalising- whether in the construction of relations among participants, in the construction of self, or construction of knowledge, pedagogy proceeds via enactment of normalisation, surveillance (Gowe, 2002, p. 6). Students were normalised through pedagogies that aligned their limited 'agency' to the instrumentation of power. The superordinate agents (lecturers) had powerful transmission tools (microphones) that implicitly gave them an upper hand in classroom discursive practices, which students were denied. This addresses the question: *1.5.8. What other contextual, meso and macro factors influence lecturer-student and student-peer interactions in face-to-face academic contact?*

#### **6.3.4.2. Psychological tools**

On Facebook, the lecturer/online administrator used direct elaborations, emphasis and explanations as cognitive scaffolding tools. This lecturer summarises this in her account of her role on Facebook (LA. 1). This scaffolding involved administrator's elaboration of concepts in her responses, directing student attention to the critical aspects of the problem, providing background information to the solution, and giving relevant examples (see WP 83, DBP 80 and DBP 112). I infer that Facebook regenerated questioning opportunities lost in large undergraduate classes, where asymmetrical lecturer-student academic relations were more salient.

The complementation of classroom interaction with Facebook is evident in one student's account of lectures:

*What I have observed is that if someone posted a message on Facebook to the lecturer the next day she revisits the message in class. She explains what the message was about to the whole class (Interview 8/05/08).*

Therefore, the porosity of the boundaries between offline and online interaction ensured that classroom interactions fed into and enriched online interactions and vice versa. That said I interpret that the situated nature of these interactions implies that it was those students who had participated in online discussions that were more empowered psychologically by the lecturer's elaborations in class. This thus potentially triggered asymmetrical power relations even in horizontal discourses. The discussion in the two sections above answers the Research question:

Below are empirical materials that summarise the different genres of tools used in lectures.

Table 6.3: Tools mediating activity

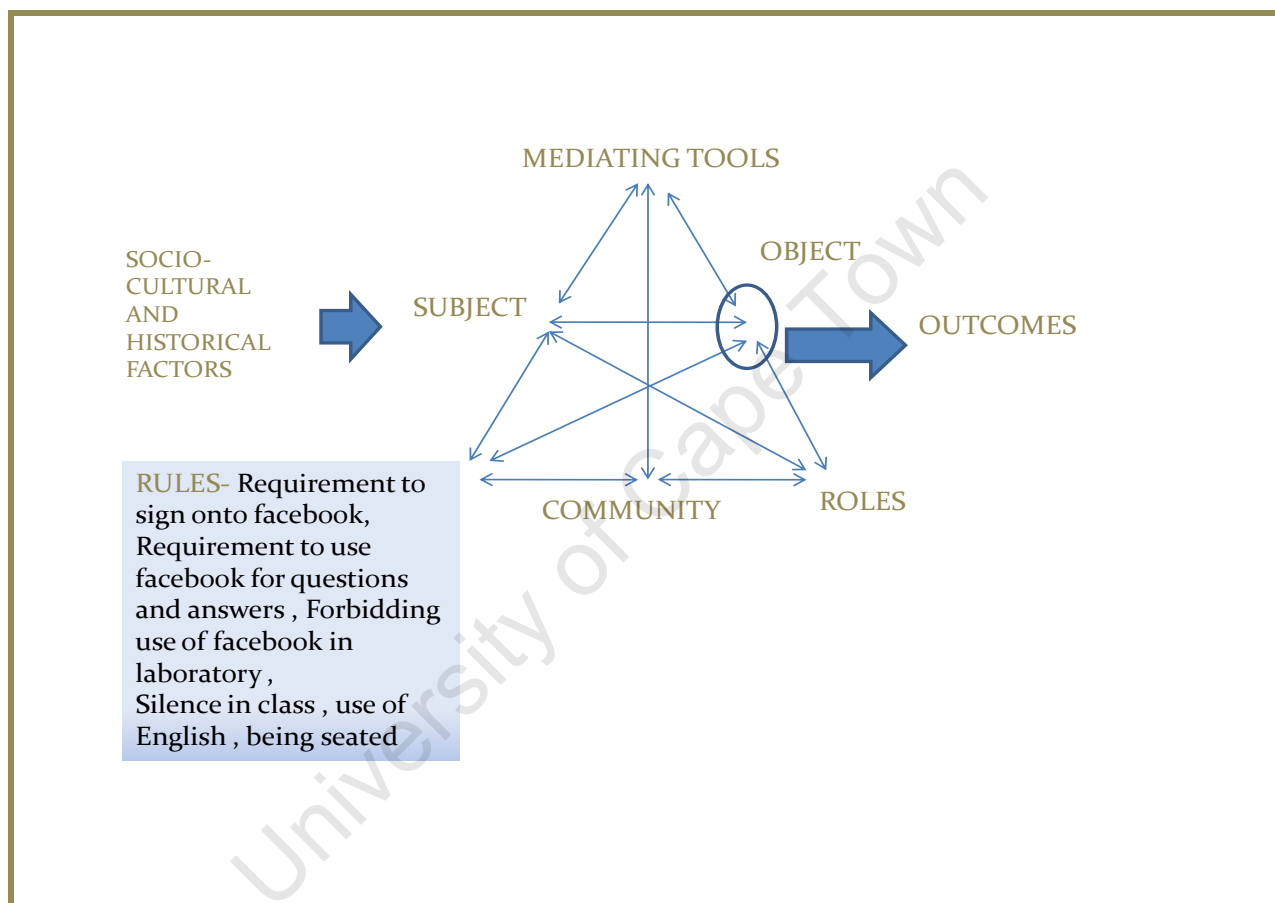
Mediating tools	Extracts of Empirical materials	Researcher' comments
<b>Material Tools</b>	Lecturer: In the next quiz, you are doing forms and reports [...]. For this section <i>I expect you to have completed everything in my handout [...]</i> .	1. Handout is used as a scaffolding tool.
<b>Psychological tools</b> Direct questions	Lecturer: <i>Why could there be a need to change from Microsoft excel to databases?</i> Student: To keep afloat L: No. <i>Why would a company need a database?</i> (Mainstream class observation transcript 21/04/08).	1. Questions are used the by lecturer to diagnose students' current knowledge.  2. Questions are psychological tools for making students reflect on the topic.
Prompt questions	(The lecturer scaffolds students in working out a problem) Lecturer: The raw materials are 60% of the salaries so what formula do I use? <i>It's equal to?</i> Students : Salaries L: <i>Salaries is in which cell?</i> S : V6 L: <i>V6 X?</i> S : V6 X 60% + L: <i>You then say what? [...]</i> (ADP class observation transcript 19/03/08).	.  1. Question prompts scaffold student learning by connecting prior knowledge to current complex tasks.  2. They are also used to gauge student understanding.
Human tool	<i>Sweetheart!</i> (Lecturer picks on a student to	1. Lecturer uses peer

	<i>demonstrate to peers</i> ). Come over here and change the credit cards. The scenario here is that no one in this household will now use credit cards [...] (ADP class observation transcript 19/04/08).	demonstrator as mediating tool to support student learning.
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### 6.3.5. Rules mediating activity

Rules mediating the teaching and learning of Access and Excel were explicit and implicit norms and values that governed the forms of engagement of between learners and academics.

**Figure 6. 5: Rules mediating activity**<sup>77</sup>



*Implicit rules* are culturally ascribed and are premised on *teaching as a professional praxis*. These include: respect for lecturers and power of lecturers as authoritative voices in the classroom. Another *non-verbalised* rule is the front position of the lecturer in the majority of classes observed signifying the imbedded authority of the expert over the audience. The *explicit rules* in class are: silence in class, and students being seated, and rising up of hands to

<sup>77</sup> Note that in blended learning, face-to-face and online interaction were mutually supportive and affected teaching and learning of Access and Excel. As such the rules of engagement cover Facebook interaction and in-class relations.

pose a question/query. In online interaction, explicit rules include: the Department requirement for all IS students to sign onto Facebook and to join the Facebook group.

A brief summary of the rules mediating activity is provided in the following table:

Table 6.4: Rules mediating the activity

Element of Activity	Extracts of observation transcripts	Researcher's comments
Explicit Rules	<p>Lecturer: <i><b>There are some students who are asking me on Facebook.</b></i> Some asked me that: With what we have done so far can we attempt Project 3.2 [...] (ADP class observation transcript 7/05/08)</p> <p>L: <i>(Two students are freaking and laughing...).</i> <i><b>Can you keep quiet. What's exciting?</b></i> (ADP class observation transcript 23/04/08)</p>	<p>1. Facebook is a department sanctioned consultative space.</p> <p>2. However, the freedom students have to consult anyone within their network means SN subverts this vertical power relation.</p> <p>1. Student silence entrenches lecturer's control and regulative authority.</p>
	<p>No one must own a credit card (<i>The lecturer advises the student picked upon [...] The boys start speaking in Xhosa. The words seem directed at the student the lecturer called to the front</i>)</p> <p>L: <i><b>Why are you guys speaking in that language? If I hear you speak that language again you will go out.[...]</b></i> ( ADP class observation transcript 7/05/08)</p>	<p>1. The lecturer enforces the rule that students should use English-the institution's language of discourse.</p> <p>2. The use of English could be disempowering for second language speakers.</p>

The table above demonstrates that in authoritative classrooms, there were limited opportunities for the sharing of power between academics and lecturers. Rules regulate the behaviours of students, requiring them to speak when asked to by the lecturers. Raising hands, and being silent when the lecturer speaks while meant to maintain order and regulate

classroom conduct, this control of student behaviour imposed ‘regulative discourses’ (Bernstein, 1996) that entrenched lecturer dominance over students.

Facebook’s rule in classroom interaction was both democratising and constraining. On the one hand, sanctioning of Facebook as a department consultative space implicitly imposed rules of engagement in a supposedly “student controlled” space. On the other, the freedom to consult peers, senior students and the extended academic community enjoyed by some students potentially subverted the monolithic voice of the educator. The above discussion addresses Research question: 1.5.1:

#### **6.3.5.1. Language constraints**

While UCT expected its entire faculty staff to teach in English and students to scholarly engage and write academic work in this language, some PDS expressed reservations about this practice. One PDS cites challenges of conversing in English:

*I do not want to speak English [...] in my own [native] language I can get many things across. English leaves out certain expressions that we make in our own language, I can’t make certain expressions, like nxa! English doesn’t have such expressions. Even if I am chatting with my friend and I want to make certain expressions, I do not know how to do that in English.* (Interview 08/04/2008).

The statement that *“I do not know how to do that in English”* demonstrates this linguistic limitation. I infer that the academic rule for students to interact in class and on Facebook using English could have limited second English learners to ask questions on Facebook and in-class. This finding affirms language challenges for second language learners in HWUs (Section 1.2.2). Such PDS could have missed opportunities to collaborate with first language learners and academics thus reproducing relations of power asymmetry.

Some PDS from the ADP class succinctly noted in relation to whether seating next to someone of a different race mattered to them in class that:

Yes, because there is this thing [preconception] that certain races are clever [cleverer] and it makes me feel a bit inferior (Interview 13/08/08).

Yes, it do [does] perhaps some[one] is a Zulu and you [are] Xhosa. I will speak [in] my language and they will criticize it friendly [frankly] (Interview 13/08/08).

These fears and stereotypes suggest that some students tended to impose the ‘interactive setting’ (Carspecken, 1996, p. 129) and rules of engagement through manipulation of racial and linguistic stereotypes or through mastery of the language of discourse. There are two

mixed implications of these fears and stereotypes for SN: 1. That some students had more leverage to communicate their queries because the social presence of more dominant and stereotypical students were less salient online than in FTF interaction, so this ‘democratised’ communication, 2. There would have been a reproduction of relations of dominance as some students shunned participating on Facebook completely (see students X and Y in Table 6.2). The discussion above addresses the Research question: 1.5.1

### 6.3.6. Roles mediating activities

Roles are the *divisions of labour* that first IS year students and academics assumed to realise the objects of learning. Quizzed on why she preferred Facebook to in-class lecturer consultation, one timid PDS who attended mainstream class<sup>78</sup> acknowledged that:

I am freer [on Facebook] and more comfortable to ask. ***When I am in a lecture and want to ask something, I have to think twice, is this appropriate? Is this not a silly question? But when I am on Facebook gee! I can ask any question. There is no one who heard what I have just asked now. However, if it were in class, classmates would say, “stop wasting our time” [...]*** (Interview 08/04/2008).

The statement “*classmates would say “stop wasting our time”*” suggests that more dominant students assumed a vertical role of silencing peers who wanted to ask questions. This challenges the widely held assumption in transmission pedagogy that students are homogenous entities with similar learning needs that require decontextualised content. It seems superior-subordinate academic relations also developed at student-peer levels as some students controlled and marginalised their peers in classroom discourses. The statements “*When I am in a lecture and want to ask something, I have to think twice, is this appropriate? Is this not a silly question?*” invokes a sense of powerlessness of some PDS in relation to PAS. The preference for Facebook interaction supports my thesis that some PDS were appropriating SNS as ‘personalised’ and ‘student controlled’ spaces to reclaim social and psychological power, and learning opportunities lost in hegemonic classroom discourses to more dominant students. This discussion answers the Research question 1.5.1. The same citation “*But when I am on Facebook gee! I can ask any question. There is no one who heard what I have just asked now*” above also demonstrates the capacity of SNS interaction’s to democratise participation through ‘protecting the identities of participants

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<sup>78</sup> Because passing the entrance examination on ICT proficiency was the main criterion used by the Department for admitting students for the mainstream class, PDS who marginally passed this exams were also admitted to this mainstream class comprising mainly PAS.

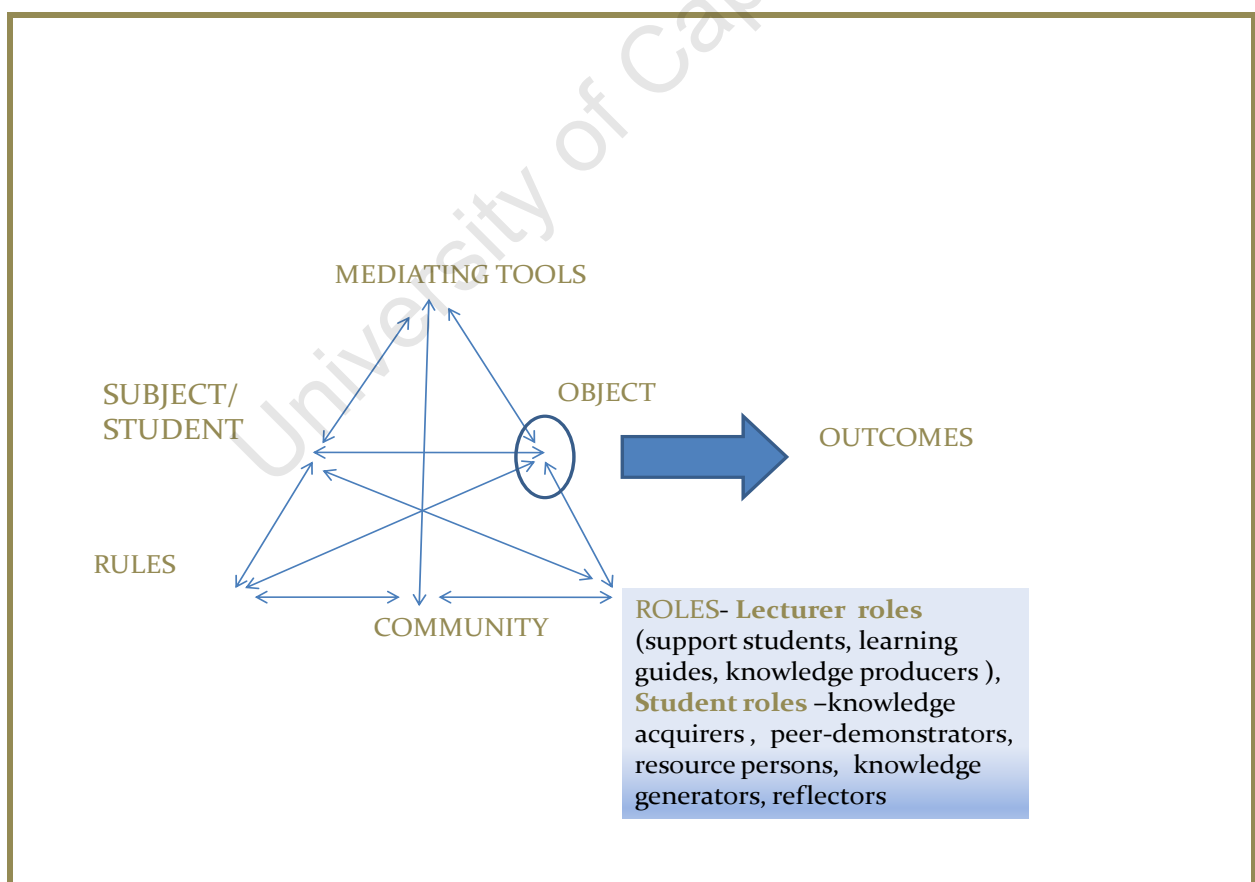


while affording access to information in ways that would otherwise be impossible for such timid students in FTF classroom interactions. Facebook thus disrupted the hegemonic voices of PAS, and democratised academic relations at student-peer levels. This addresses the question: *1.5.3. In what ways do SNS subvert power relations and what are its subsequent effects on lecturer-student and student-peer interaction?*

#### 6.3.6.1. Traditional roles

Student roles in large lectures were often limited to asking questions (few), seeking elaborations on issues, peer-demonstration of concepts (for the ADP class), limited note taking, and seldom participated in collaborative group tasks in class. On Facebook, the roles they assumed were a function of type, intensity, and diversity of use. They assumed roles like information disseminators, knowledge generators, resource persons, reflectors, and information acquirers.

**Figure 6. 6: Roles mediating activity**



#### **6.3.6.2. Peer demonstration of concepts**

Sometimes, the ADP students were presented with the opportunity to demonstrate concepts to their peers. This collaboration shifted the role of participating students from recipients of educator-generated content to resource persons (for their peers) and informal assessors of peers' level of understanding of issues discussed. As one lecturer noted in a de-briefing:

This is why I like the [class name indicated] class, *they are co-operative, and in most cases, they want to show me what they think. Like that girl who was saying let, us use this method so she had to go and try that method to prove her point* [...] (Debriefing 09/04/08).

Peer demonstration demonstrated a power sharing deal between students and the lecturer through allowing students to demonstrate their views and knowledge and assuming lecturer responsibilities of leading the discussions, showing areas of emphasis, and summarising technical processes. While this empowerment was scarce given the limited contact time, they formed the basis for experiential learning and equalised academic relations between students and academics.

#### **6.3.6.3. Peer-based collaboration**

Peer based collaboration was noted in one observation where students were required to contribute words they know that related to the Internet. The short collaborative exercise allowed for intellectual dialogue, and peer-based generation of knowledge. Although not pervasive, there was evidence of knowledge created in class persisting online and vice versa. The lecturer's debriefing below demonstrates this porosity of boundaries:

[...] The noise level was a bit high because I think some were discussing the answers I posted on Facebook. I am sure because I heard some students discussing them. *Someone did not understand and s/he would start discussing it and s/he would want to ask later what I meant. Some would even ask; should I post this question on Facebook? Will you answer me more elaborately?* (Debriefing 14/05/08).

I interpret that there was a close coupling of in-class interaction with online interaction. Collaborative discussions in class fed into question-based online consultation with the lecturer.

#### 6.3.6.4. Student roles in Facebook

A vertical role in Facebook at peer-student level was a resource person role (I have outlined other traditional roles in the Discussion Chapter). Some students assumed the role of resource person as they advised their peers during their interactions on the discussion board. One typical case involved a student inquiry directed at the lecturer (WP 37), followed by a peer's intervention as a resource person (WP 36), and the administrator's approval of the advice given (WP 35). Given the capacity of some high achievers to advise peers, these practices suggests that multiple layers of roles potentially emerged. Therefore, lecturer-student relations of dominance in class would take other forms online-namely hierarchical relations at student-peer level: This answers the question: 1.5.2. *How do peer-based academic support structures using SNS provide insights into the problem of lecturer-student relation?*

The table below highlights examples of lecturers' roles in IS classes.

Table 6.5: Roles mediating the activity

<b>Roles mediating Activity</b>	<b>Extract of observation transcriptions</b>	<b>Researcher comments</b>
Lecturer's roles	<p>Lecturer: <i>The notes for doing the assignment are on Vula.</i> You have not visited Vula.</p> <p>L. [...] <i>You understand, No. Did you understand?</i></p> <p>S: No</p> <p>L: <i>I will repeat.</i> [...] So we want to find the fields [...] ( Mainstream class observation transcript 14/04/08)</p> <p>L: Today <i>we are going to cover the stuff</i> on page 1, 3, and 5. <i>It is the same stuff that you are going to do so you should pay attention</i> [...]</p>	<p>1. It is an instructor's role to provide lecture notes.</p> <p>.</p> <p>2. Explaining and elaboration of technical processes</p> <p>3. Demonstrating and assigning tasks</p>

As shown above, in learning Access and Excel the transmission approach to instruction worked to enforce learning relations that were vertically defined. Lecturers assumed the authoritative position of experts giving lecture materials and demonstrating tasks in ways that

scaffolded learning, but paradoxically, enforced their regulative control of the pedagogical discourse.

### 6.3. 7. Community involved in activity

The community on Facebook comprised lecturers, students, and few senior friends, and few international Facebook groups/networks that interacted with each other on Facebook as ‘friends.’<sup>79</sup> Two regular lecturers (who were also on Facebook), and three other guest lecturers taught this ICT course. The fact that the regular lecturers interacted more with students in class than the other three lecturers seems to suggest that Facebook interaction could be more effective when trust was established. As the online administrator noted:

*They (students) know Kingston (pseudonym) and me from Facebook. If it's someone else [guest lecturers]... they teach and they go and students don't see them until their next chapter [so] they (students) tend to keep quiet and the interaction is less. But me and Kingston are regulars so they will tend to ask me and him more questions* (Interview 14/05/08).

The above demonstrates that lecturer familiarity with students on Facebook had implications on the intensity of lecturer-student interactions in class. Step two of Salmon's (2000) five-step model<sup>80</sup> for supporting e-learning processes emphasises building trust through online socialisation where the online moderators' roles is facilitating, and familiarising students with the online environment, and providing bridges between social-cultural aspects of offline and online learning environments. I interpret that Facebook reduces social distance between academics and students as the students engage more with academics when social capital and increased familiarity are created. This breaching of social distance potentially subverts academic hierarchy as status barriers are removed with heightened interactivity. This addresses Research question: 1.5.3.

### 6.3.8. Outcomes

Facebook was reported to increase student agency and self-pacing of learning (academic empowerment). As a technology some of them had been using since high school, they felt they knew it better than academics hence it equalised lecturer-student relations (see LC 25). Students also felt that they were in full control of Facebook as UCT had no control over it,

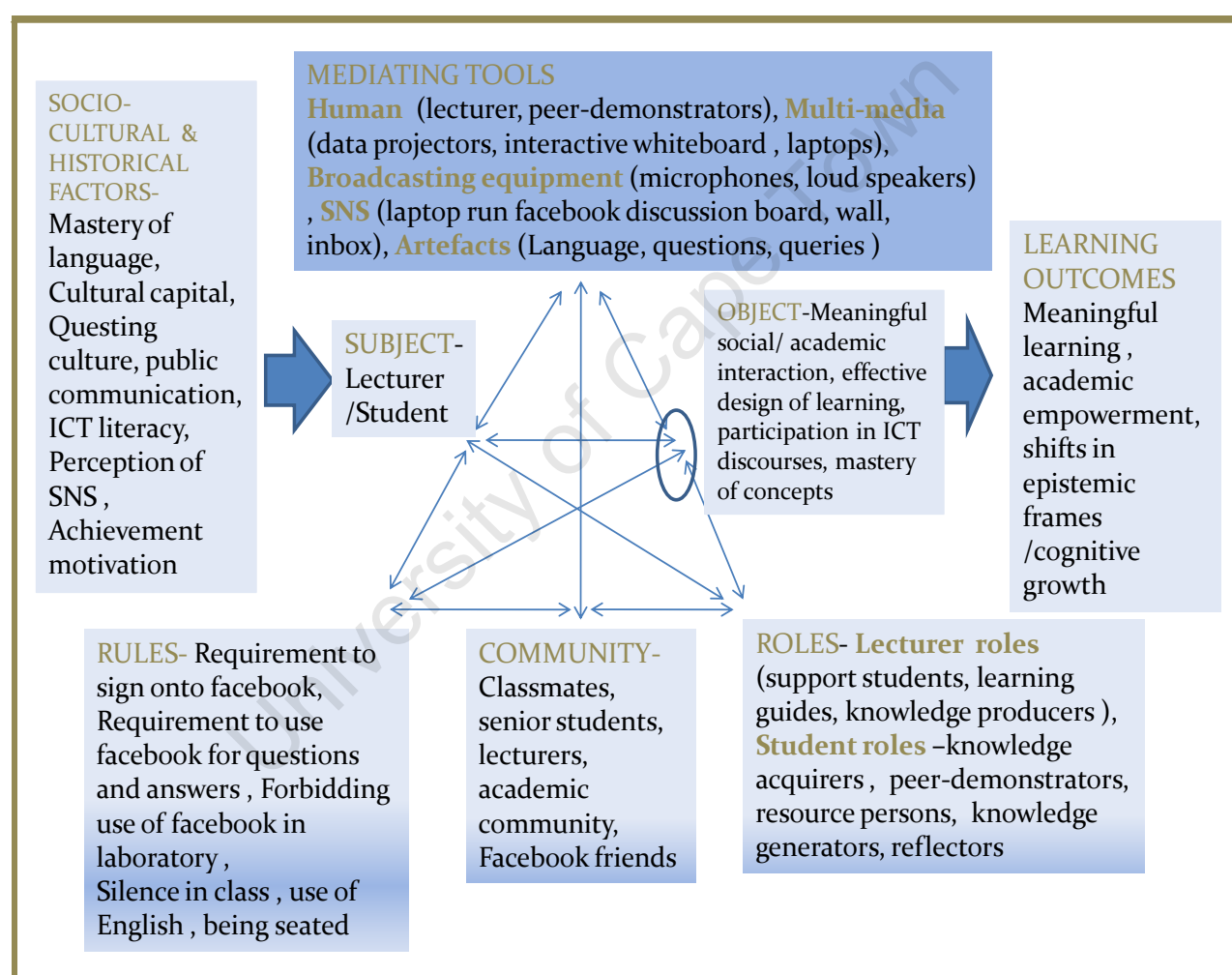
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<sup>79</sup> The term friend in Facebook means a connection and not ‘friend’ in the normal sense.

<sup>80</sup> Salmon's (2000) Five Step model of online facilitation involves access and motivation, online socialisation, information exchange, knowledge construction and development. In this model students progressively gain familiarisation, control and responsibility for their knowledge construction and cognitive growth.

though the IS department imposed some kind of control. Unlike Vula that was UCT controlled and perceivably susceptible to institutional manipulation, Facebook is; a global network that runs from the U.S. As such, their personal life and activities were conceived as immune to institutional control. The aforementioned lecturer alluded to Facebook creating a ‘student controlled’ environment that was empowering and free from administrative controls (see LC. 24). Students had a feeling of ownership that could not otherwise be felt in LMS. This answers the Research question: 1.5.3.

**Figure 6. 7: The main activity system of teaching and learning Access and Excel**



## 6.4. Modelling and analysis of the classroom activity

### 6.4.1. Research participants

Although five lecturers who taught the IS classes (ADP class and the mainstream classes) were observed and interviewed in depth, I present in my research the findings from three lecturers. I chose these three lectures because they taught students for a duration long enough

(for almost two semesters) to allow me to trace changes in their teaching practices and to identify some resultant contradictions that emerged. Of these three lecturers, two interacted with their students on Facebook (one with a social presence, and the other as the online administrator who answered student queries) and the other lecturer used blogs (another SNS). The table below summarises the lecturers investigated, the students they taught, and the technologies they used in class and beyond.

Table 6.6: Participants in the study

<b>Educator</b>	<b>Students</b>	<b>Technologies used</b>
<b>Lecturer A</b>	Mainstream and ADP classes	Facebook, blogs, discussion forums on Vula, Multimedia (laptop run Facebook, interactive white board, data projector), microphones
<b>Lecturer B</b>	Mainstream classes and ADP class	Facebook, blogs, discussion forums on Vula, Multimedia, microphones
<b>Lecturer C</b>	Mainstream class	Blogs, Vula discussion forums, and interactive whiteboard, data projector, microphones

## 6.4.2. Examination of the Areas of Contradiction<sup>81</sup>

### 6.4.3. Lecturer A

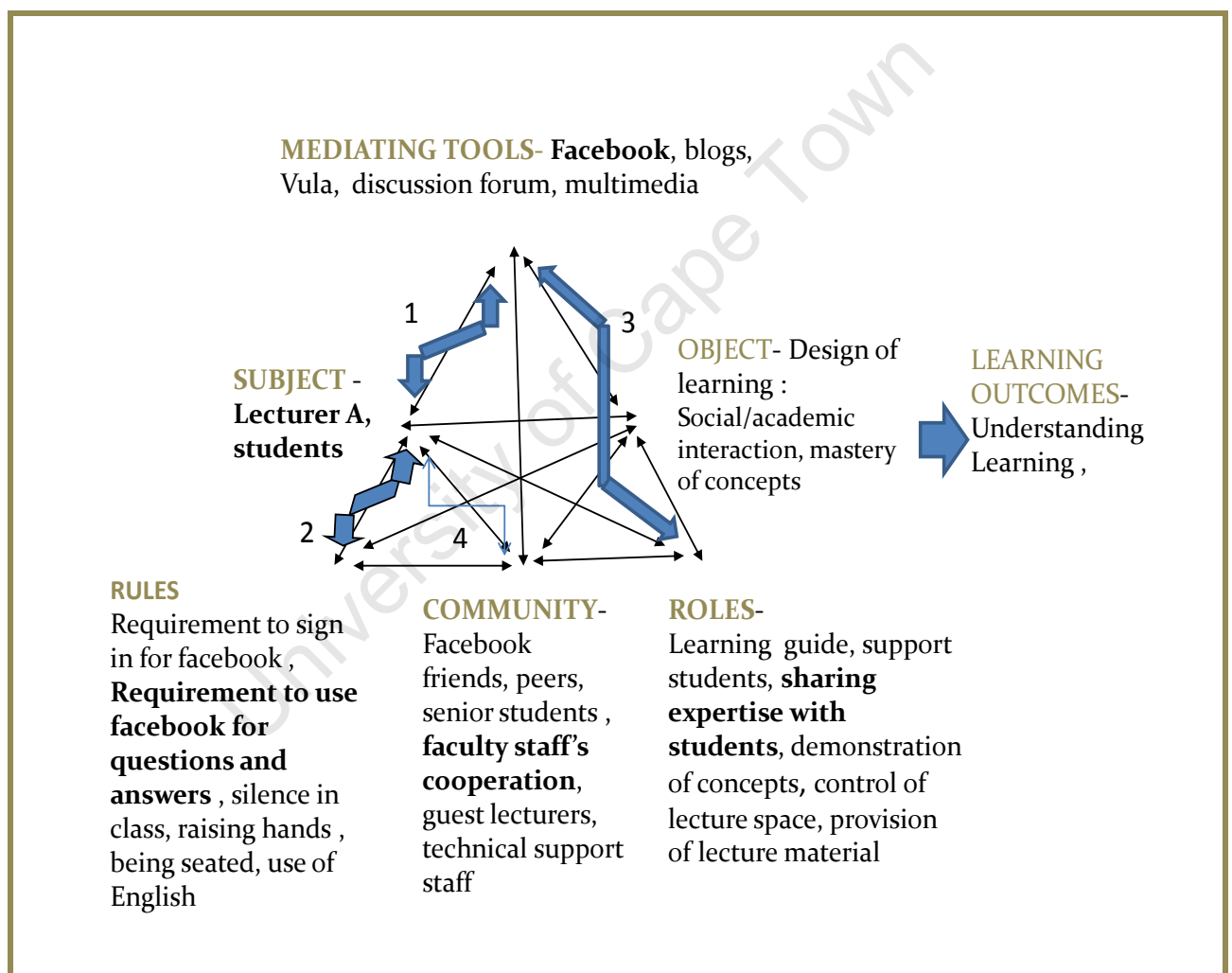
#### 6.4.3.1. Lecturer's teaching strategy and conception of learning

Lecturer A's object was to design learning activities in ways that ensured student mastery of Microsoft Excel concepts, perfect their acquisition of Excel skills and foster meaningful social and academic interactions with students. To ensure this, lecturer A used multimedia technology to demonstrate Microsoft Excel. She used summative assessment (assignments and quizzes) to assess student understanding of the technical processes of the tasks she demonstrated in class. The contradiction in Lecturer A's work activity was that although she needed to identify promptly student information gaps and misconceptions about Excel technical processes through her demonstration of concepts in class (using representational

<sup>81</sup> All the contradictions in lecture A's work activity discussed in this section relate to Figure 6.8 (see Contradictions 1-4).

technology), students had no opportunities in class for practicing with technology (computers) to show this understanding. Students only executed tasks in the labs where she was least involved.<sup>82</sup> This lack of practice (or experiential learning) by students during instruction became a dilemma that challenged her with regards accessing their mental structures / their level of understanding-a contradiction between subject (student' understanding) and tool-in-use (use of representational technology) (see 1 in Figure 6.8 below).

**Figure 6. 8: Lecturer A's Work Activity System**



<sup>82</sup> Laboratory tutors who were Honours and Masters students assisted first year IS learners in the labs and marked their work. The lecturer's role was minimal, she only supervised tutors.

The turning point was when she began to make ‘forced’ errors during her demonstration of Excel to force students to ascertain what was wrong with her technical steps in problem solving. She cited this strategy in an interview:

It is not in social sciences where you give an exercise to students in groups in class, and they have to think about it. ***Here [her department] they have to do it but in the labs [...]. Therefore, the only way for them to learn is for me to go to Excel, make a mistake and so then, they think about it. That is the only way they learn faster [...]*** (Interview 9/04/08).

In a lecture, the conceptual difficulty of teaching (through demonstration) a technical subject that demanded the use of computers by the novice at the point of instruction thus complicated learning. Below is an example of the forced errors she made to ‘push’ students to reflect on the problem:

*(The lecturer attempts to draw a pie chart and the laptop reject her command and it clicks loudly).*

Lecturer: ***What is wrong?*** *(The students laugh but she keeps on demonstrating).*

L: *(She follows the technical steps needed).* Select-my data insert, I want it to give me a pie chart. ***Why is it [the laptop] refusing to give me a pie chart?***

L: ***Why is it refusing me? [...]*** *(Students cannot help they seem not to know).*

L: How do I define my data set? It is strange. Select the data to be done, I have done that, -select the design, I have done that [...] ***Why then is it refusing to give me a pie chart*** *(The students cannot find what is wrong with the process).*

L: *(No student can give a good guess)* I selected the wrong one. I should have selected this one *(She finally gets it).* Why didn’t you tell me, you are sleeping also *(Students laugh) [...]*.

L: ***Who identifies the mistake that I created?*** *(Observation transcription 2/04/08).*

The last statement demonstrates that the mistakes were deliberate. The use of forced errors constituted a shift in practice from mere demonstration of technical processes where it was difficult to identify student mental structures and their mental shifts because of learning. With the continual use of this strategy as the course progressed, students started to engage with the problems. One example where a student identified the error is cited below:

*(The lecturer is explaining the purpose of Advance filters and how to calculate the risk range)*



Lecturer: I have done that, I have specified my criteria. But it's (the laptop) not responding. **Why?**

Student: Use uni-purpose.

L: I don't need that because there are some records that are going to be repetitive.

**Why is it refusing?**

S: Some say delete it others say copy it to another location. (*Students are employing trial and error. They seem to be co-operating with the lecturer*).

L: **So why is it refusing?**

Laura: (*A student raises her hand*).

L: Oh, someone is awake! I thought you wanted to give the solution; it's a question? (*An indirect way of pushing students to think*).

Laura- I am asking why you don't put the product ID so that you know the criteria first and then [...].

L: **We have some intelligent chaps here hee?** (*The lecturer types [on her laptop] as the student gives directions*).

L: [...] **Why didn't I think of it?** (Observation transcription 9/04/08).

The above suggests that the lecturer managed to widen the object (student mastery and understanding of technical processes) by shifting from simple demonstration of technical processes to pushing students to reflect on problems through identifying her technical errors and resolving them. This allowed students' understanding and permitted the lecturer to assess formatively student cognitive growth on the other, and thus resolving the contradiction. This approach however was not employed in Facebook, given the public nature of Facebook interaction that could lead to negative publicity by other lecturers/ students as an ineffective teacher.

#### **6.4.3.2. Use of Facebook for teaching**

All first IS students were required by the IS department to sign up and join the department Facebook group. Lecturer A's dilemma involved the need to recruit phenomenal student academic participation on Facebook to support them without necessarily 'compelling' reluctant students to co-operate with this departmental requirement that made Facebook use a requirement. That is, a contradiction between department's rule (rule) and student attitudes towards Facebook (subjects) (see 2 in Figure 6.8). The lecturer voiced this in her debriefing with the researcher:

***There are students who still do not use Facebook for academic purposes so they don't benefit. I don't know whether I can say they are excluded or what. [...]. Do we make it a choice because if we do, most students aren't benefiting because I told them that their first assignment would be to register on Facebook [...]. They did that and that's it [never used the site] (Debriefing 14/05/08).***

The dilemma was that by making Facebook use compulsory to scale up mastery of the subject technicalities, some students became alienated and created Facebook accounts that were dormant. On the other hand, allowing free use made the facility under-utilised as students felt under no obligation to participate. In-depth interviews with students confirmed this lack of Facebook use for academia (cited Table 6.2). The prescription of academic use of Facebook could have been conceived by students as an imposition of lecturers' 'dispositional power' (Clegg, 1989) in what was conceived by them as 'student controlled' space. The emphasis on academic use could have alienated some students who were more obsessed with playful learning (edutainment) and social networking. Another student when asked about Facebook' academic virtue was utterly sceptical:

***I think nothing because it is a social thing. The content that gets going on Facebook is not academic; it's social. Its lets corporeal, let's go drink, which is very nice but I think there is a place for it [...] I do not think for people to organise their life is academic [...] (Interview 20/03/08).***

The turning point, was when lecturer A identified this contradiction and emphasised the academic value of Facebook consultation every time she had a session with students as a way of increasing voluntary student participation. This shift in practice (from imposition to persuasion) was occasionally noted in lecturer A's address to students as she winded up her ADP lectures:

***I am always on Facebook. You guys are not using Facebook, I am spending more time with the X Class [course code for mainstream class], and they are using me. I know if you have a problem, some of you can't talk here, or come to my office. So call on Facebook. [...]. I want you to use it for explaining your educational problems not dating (Observation transcript 21/05/08).***

This attempt at widening the object of the lectures through more student involvement worked to increase lecturer-student Facebook interaction. More students were reported to be engaging with this lecturer by the end of the second semester. The lecturer also occasionally elaborated in class queries she would have addressed with some students on Facebook to increase complementarity (see DSX. 18 in the Appendix).

Lecturer A acknowledged the need to change the recruitment strategy for student Facebook participation in future:

The approach has to change next time. *I am sure students did it* (opening Facebook accounts) *but they didn't know the purpose. They did it as a requirement to get marks. [...] so maybe our goal for that assignment was not clearly articulated to them and that could have created inclusion and exclusion. It's the starting point of creating differentiation because those got our motive went on Facebook first specifically for that thus excluding others [...]* (Debriefing 14/05/08).

Although students were informed about the academic use of Facebook, the challenge was that a range of possibilities of effective uses of these sites was not suggested to allow for lecturer-facilitated exploration. Creating such possibilities could have unlocked potential for broadened use while keeping an eye on the academic facet of Facebook interaction. Differentiation activated by varied extent of use could have triggered asymmetrical power relations at student-peer level, especially the PDS. This answers Research question: 1.5.2.

#### **6.4.3.3. Redundancies**

The use of Facebook as a consultative space<sup>83</sup> aimed to offer a pre-emptive strategy for handling similar course related questions that students often asked. Due to student reluctance/inability to track previous online discussions for questions already answered by the lecturer<sup>84</sup> coupled with their dependence on teacher's support, contradictions manifested in students posting redundant questions. The lecturer complained about this unanticipated contradiction between use of Facebook (tool) and student failure to browse prior questions (role) (see 3 in Figure 6.8). In a debriefing this lecturer noted:

*[...] Sometimes the 15<sup>th</sup> student asks a question that I have already addressed but they don't bother reading the questions that I have been addressing before asking [...] and thus a big problem [...] Because the purpose of Facebook should be reducing redundant questions* (Debriefing 14/05/08).

Drawing on the lecturer's account, it can be deduced that academics envisioned Facebook to work as an information repository for students. An information repository implies that the metadata (artefacts) generated would be accessed and re-accessed to augment these students' memory. Many students did not check prior conversations before asking questions. My interpretation is that academics' vision was to create symmetrical academic relations by

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<sup>83</sup> Although it was a requirement to open a Facebook account and join the Department group, use was optional.

<sup>84</sup> Facebook discussion board and wall retained the trail of artefacts of previous interactions and these could be freely accessed by all Facebook group members.

rendering all students access to information and creating a space for dialogic interaction. To the extent that some students failed (at this stage) to effectively use Facebook as an information repository and a platform for critical reflection, such students were essentially set at the whims of technology.

Apart from the weakness of limited browsing and reflection on previous queries cited above, the other student practice that caused redundancies was some students' preference of private communication with the lecturer (via her private inbox) to public consultation. This deprived other students of access to information exchanged during such interactions. In response to this contradiction, the lecturer rebuked these students who engaged in private conversations with her and emphasised that they use Facebook public spaces for peers' benefit (see last statement in IP 110). The effects of this directive was to impose relations of hierarchical dominance and limited power of students in terms of exploration of all Facebook spaces for learning. I answered the question: *1.5.3. In what ways do SNS subvert power relations and what are its subsequent effects on lecturer-student and student-peer interaction?* The requirement of using public spaces resolved the contradiction by broadening the object as more answers became available in public spaces.

#### **6.4.3.4. Collective responsibility and student academic support**

The last contradiction for lecturer A related to the demands for collaborative efforts with departmental colleagues. Although all Facebook queries were handled by this lecturer, some questions emerged from chapters taught by other lecturers thus necessitating their co-operation (for example, providing the context in which the queries emerged) when student queries related to their topics. The contradictions emerged when other lecturers failed to co-operate at all or failed to respond immediately to ensure that inquirers' questions were addressed expediently. Lecturer A summarised this tension between her collaborative efforts with other lecturers (community) and her (subject) motivation to support students (see 4 in Figure 6.8):

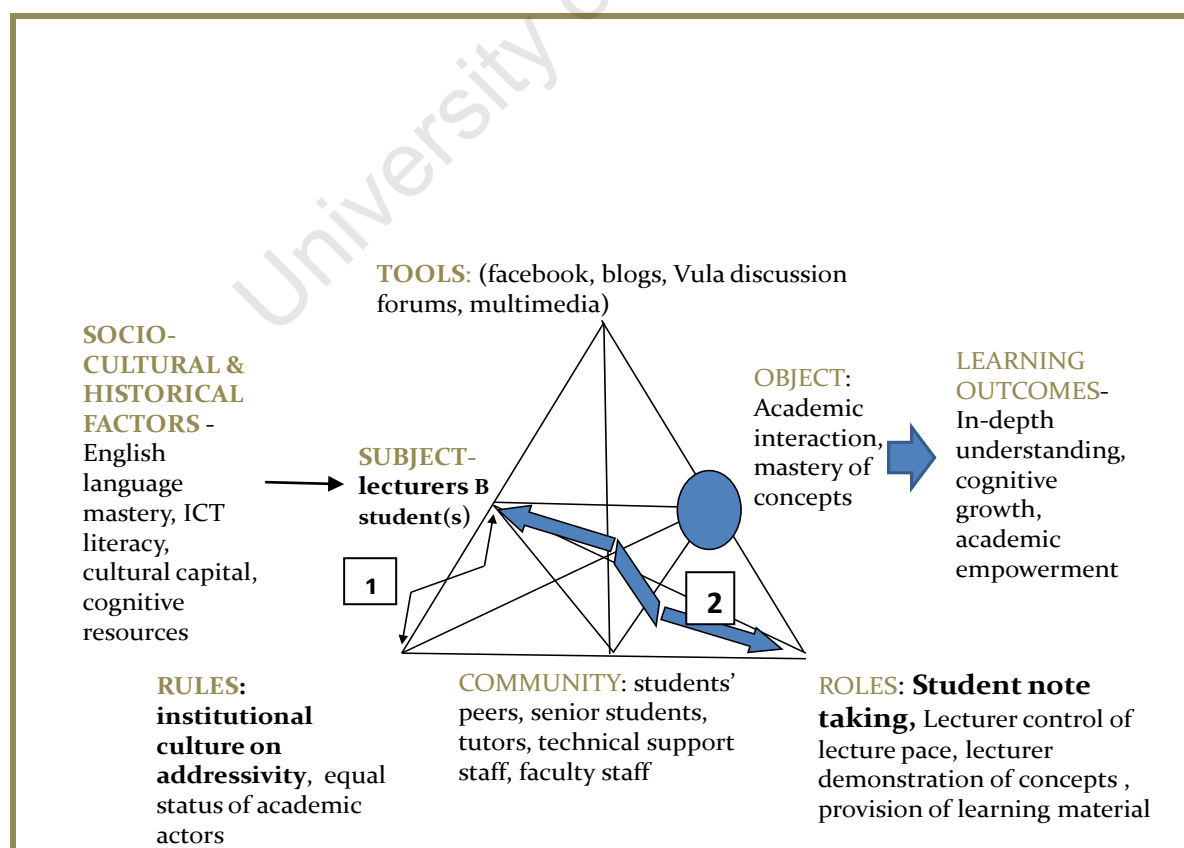
*The problem is that students don't ask that lecturer [who taught the topic] but me on Facebook [...] so it becomes difficult to address their queries. One student posted a query that: we were not taught [topic cited] [...] so I had to check who taught that part and it wasn't taught. But I couldn't expose my colleague because it would appear as if we were not a collective as a department. [...] I sent an e-mail to this staff, I never got a reply so I didn't answer the student (Interview 06/08/08).*

The unresolved contradiction was thus between the lecturer' (subject) responsibility to address student queries and failure of community members (community) to co-operate with her. She could not compel them to act to justify her role owing to the doctrine of collective responsibility- that demanded colleagues to behave in mutually supportive ways. This breakdown in collaborative processes narrowed the lecturer's objective of supporting students by lowering her expectations about the extent of support she would get from colleagues (community) during academic consultations. This addresses question 1.5. 8.

#### 6.4.4. Lecturer B

Lecturer B taught the mainstream classes and the ADP students and maintained a social presence on Facebook. Although he was occasionally called upon to provide students with general advice on the IS course administration on Facebook, he was not deeply engrossed in the day-to-day interaction with students on Facebook. During his lectures, lecturer B however, encouraged students to engage with the online administrator (lecturer A) when they had any course management or task related queries (see lecturer B's activity system on Figure 6.9 below)

**Figure 6. 9: Lecturer B's Work Activity System**



#### **6.4.4.1. Personal beliefs about academic relations and institutional learning culture**

Lecturer B noted the tension between his beliefs (*subject*) about what lecturer-student relationship should exist and the learning culture perpetuated by the institution (*rules*)-that is, subject-rules contradiction. The lecturer conceived a misalignment between the institution's culture on addressivity of lecturers (that seemed to negate the use of titles) and the need to respect lecturers as symbols of authority. He cited instances of lecturers being booed in class by students as attributable to student abuse of the university's culture of collegiality and equality of status between educators and students. For big lectures, the lecturer bemoaned students' high noise levels, and student lack of respect that constrained lecturer-student interaction. This strained the lecturer's meaningful engagement with students during lectures. The lecturer partially resolved this contradiction using persuasion/charm when admonishing inappropriate student behaviour in class. As Carspecken (1996, p. 131) alludes, people skilled at 'charming' win loyalty from others through the employment of culturally understood identity claims and norms. For this lecturer, the use of polite language and his persuasive power worked to ensure students co-operated with his motives. This helped retain hierarchical academic relations with students. Lecturer B reiterated this during a debriefing that:

*I can't teach in an environment where students are talking. They take advantage of the fact that they are many. They know that if one student boos at me the rest will follow [...] I know we come from different learning environments but when things are not right I tell them* (Debriefing 14/05/08).

By admonishing students, the lecturer was working towards fostering a mutually beneficial relationship with students, hence widening the object of learning. The above discussion addresses the Research question: 1.5.8.

#### **6.4.4.2. Inter generational tensions**

The lecturer noted the tension between his expectations of students to take notes as he lectured and student reluctance to do so. It seems some inter-generational tensions emerged from the fact that the lecturer B was groomed in a disciplinarian academic culture where students listened to educators and silently took notes. To the contrary, students especially PAS he taught grew up with interactional technology (as part of the Internet generation) and did not like to take notes-a contradiction between roles (of students) and subject's

expectations (lecturer). The tension therefore, manifested in the lecturer's subconscious expectations for students to behave in the same way he was taught. A debriefing with lecturer B echoes this dilemma:

*When I am talking, they [students] just fold their arms and I ask them: You mean you are listening that you can take everything that I am saying by folding hands? They must write down because not everything that I say will be on Vula<sup>85</sup> or in the notes. Sometimes I give them examples that are not there (in Vula notes) or I will explain a concept better (in speech) than the way I wrote it in the notes [...]. That culture is hard for me (Debriefing 2/04/08).*

This contradiction between the lecturer (subject) and students' roles of note taking (roles) was never resolved and the object remained untransformed (see diagram below 6.9). Although his permanent social presence, assisted him in accessing firsthand the problems students had, students did not demonstrate a change of practice in class. That said however, it seems Facebook brought the two generations together by training some students to contribute content in online spaces. This discussion addresses Research question: 1.5.1.

#### 6.4.5. Lecturer C

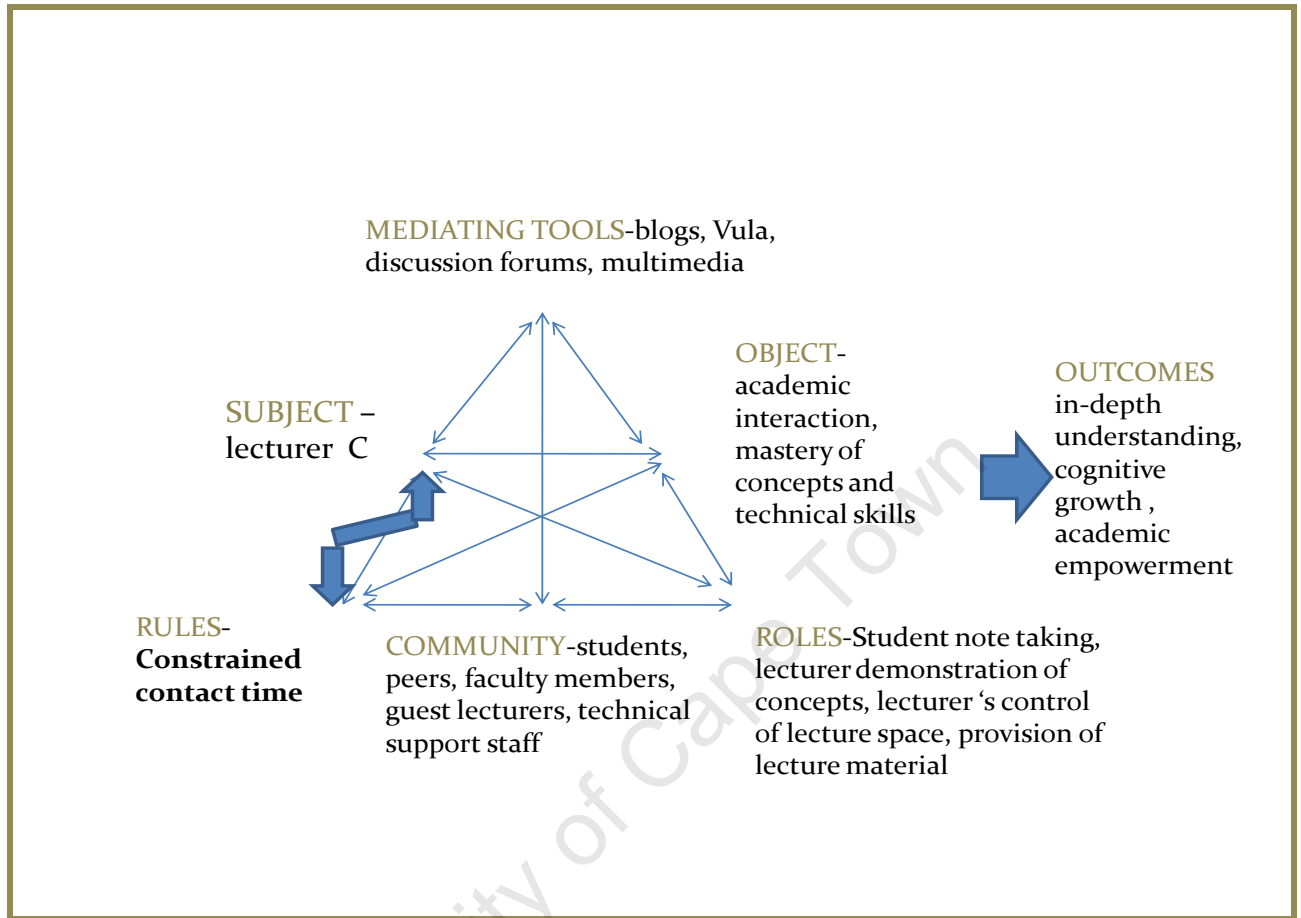
##### 6.4.5.1 Limited contact time

The diagram below shows the contradiction in lecturer C's work activity system.

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<sup>85</sup> Lecturers taught classes and students would later access the notes on the LMS, Vula.

**Figure 6. 10: Lecturer C's Work Activity System**



Lecturer C was not on Facebook. The contradiction the lecturer noted was between his desire to explain Excel concepts in-depth and intensify meaningful interactions with students, on the one hand, and the limited contact time that forced him to accelerate lecture pace, on the other. This constituted the contradiction between the subject (lecturer) and the rules (defined contact time). The former implied more interactivity and potential for student participation in the construction of knowledge through seeking elaboration of concepts. The latter implicitly meant that the lecturer would rush and summarise content in order to finish his huge workload. Lecturer C in his account of lectures recounted this dilemma (see LD. 3 in Appendix). I infer that these time constraints become a source of unbalanced academic relations between academics and students because of limited constructive dialogic interaction between the experienced expert and students. This means students lagged in becoming fully immersed participants in theoretical discourses of the subject. The contradiction above



remained unresolved and the object remained untransformed. This answers the question: 1.5.8.

## **6.5. Taxonomy of student Facebook identities**

In this section, I address the following question:

1.5.6. *What different student identities emerge from their academic (peer-based and lecturer-student) interaction on Facebook?*

Partly influenced by Portes and Vadeboncoeur (2003) and drawing on empirical evidence from my study, I identify and discuss five broad complex identities that emerged from the genre, and intensity and motivations of student interactions on Facebook. These identities are:

1. Cognitively proximate / effective, 2. Cognitively emergent, 3. Cognitively Distal/divergent,
4. Cognitively challenged, 5. The Acolytes/ disciples.

### **6.5.1. Cognitively Proximate/ effective**

These identities were driven by a strong desire to achieve academically (achievement motivation) and to become experts in the IS field. These were tech-savvy ‘geeks’ who devoted to academic networking on Facebook and shied whiling away (by socialising) time on Facebook. Some of these students had family role models they were emulating and for them, academic achievement was an imperative and not an option. This drive to succeed manifested in their strong devotion to study. As one student remarked:

*I come from a background where my parents always emphasised that I should just read books, [...]. When I get on Facebook that threat is already within me, so the first thing that I look for on Facebook is academic material. [...] We were taught and made to believe the only way to make it in life is through studying, so when we grew up we did not know anything else except books (Interview 28/03/08).*

I infer that social practices (a studying culture, success motivation) appropriated early in the socialisation process were instrumental in shaping academic contact in future years. These students became pioneers in appropriating Facebook for academic networking. This resonates with the online administrator’s view that: “[...] those who got what we were trying to achieve [through Facebook] went on Facebook first specifically for that [academic consultation]

[...]. I refer to them as ‘*trailblazers*’ who took a leading edge in the academic use of Facebook.

These students were strategic informational seekers and synthesisers who corroborated information from diverse sources thus transcending instructor-derived resources. One student alluded in relation to the extent to which Facebook could pace his learning that:

*It is difficult; you cannot determine someone’s learning pace by using Facebook alone because UCT has a range of online resources available to students, like Group wise<sup>86</sup>, Vula, and websites. So one cannot determine my pace using one site, it will be distorted, especially given the diverse resources I use for research* (Interview 28/03/08).

Cognitively proximate identities therefore, were self-regulated learners with a broad repertoire of research and information literacy skills to self pace their learning. They felt that reliance on one information source is deterministic and constraining.

For these students, Facebook and lectures were not discrete learning platforms but seamlessly integrated spaces co-evolving and cross fertilising each other. As one student aptly noted with regards how his in-class interactions related from Facebook interactions:

*They exist in the same ecological environment. If one is deficient, the other one will cover up. So in class if I understand 80%, the other 20% will be covered in Facebook and if I understand 20% in class I need to have 80% on Facebook, so they balance each other depending on where the deficiency lies* (Interview 27/03/08).

The above account demonstrates that learners who conceived Facebook as a virtual classroom tightly coupled with/built into classroom social practices approached Facebook as an essential academic tool. Most importantly, on Facebook the ‘cognitively proximate’ assumed several multiple recursive roles (like resources person, information disseminators, knowledge generators, and reflectors (see second extract after table 6.2)).

These identities also exploited all communication channels on the three Facebook spaces by asking questions, reading peer-generated questions and the answers they got. Lastly, although these students had time for socialisation, they managed it prudently. As effective time

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<sup>86</sup> Groupwise is a software application upon which UCT staff and student personal e-mail systems are hosted. They can share other academic resources via this space.

managers, they often resorted to multi-tasking, switching between little chatting and academic work. As one student emphasised:

My face-to-face interactions involve social conversations [...] ***although I ensure that say 75% of the time we could be discussing something that we did in class, while the other 25% is for socialising. It is all connected to time scarcity. [...] we are trying to be time-efficient, faster and doing more things at once.*** Similarly, with Facebook I could be preparing for a test [...] ***so I continually switch through windows, academia and the social at the same time*** (Interview 27/03/08).

The effective use of all learning opportunities presented to them meant that the cognitively proximate were identities with the highest potential for academic growth and hence academic power- the superordinate agents in relation to their peers.

#### 6.5.2. Cognitively emergent/ corporeal identities

This identity manifested among extrovert Facebook users that were driven by the need for camaraderie/companionship on Facebook than academic engagements. They were “*hyper communicators*” (Shelly, Cashman, Gunter & Gunter, 2008, p. 16) judging from the many Facebook group networks they were members of, many friends they often communicated with frequently on Facebook, with potential for creating learning communities. Yet these networks remained sub-optimally exploited for academic discourses owing to their strong inclination towards the *corporeal* (self-pleasure). When asked about the personal needs that sustained one PDS’ continual presence on Facebook, relationship building was central:

***I feel that I am a person who has a lot to offer in terms of relationships. When I am in the [computer] lab doing work, that relational aspect of life needs to be filled and Facebook comes quite vital. I also need updating on social issues in other people’s lives. I would write I am bored, I am dragged [...] (Interview 7/03/08).***

The interactional nature of these conversations (if exploited fully) presented vital opportunities for students to foster different academic literacies. While this identity drew on lifelong learning literacies, it could have been more academically productive had it been manipulated for academic discussions and for exchange of course related materials.

For such personalities, Facebook was a pace for relaxation, articulation of self and management of personal identities. Thus a great deal of time was spent on egoistic practices

like frequent updating personal profiles, exchange of photos, ‘meeting’ new<sup>87</sup> and old friends and sharing past and forthcoming social activities as ways for negotiation self. One PDS emphasised ‘performativity’ (Bosch, 2009) of self-identity as one the essence of her Facebook interactions:

*It promotes self-fashioning because I can construct this whole persona around me [...] because online, it is not the whole view that is there but aspects that what I wish to project and perpetuate. [...] There is a self-regulating psyche behind it because I am on my drivers’ seat with my Facebook profile and there is this whole lot of audience watching and I guess this is thrilling [...] (Interview 11/03/08).*

The statement that: “*There is a self-regulating psyche behind it because I am on my drivers’ seat with my Facebook profile ...this whole audience watching*” demonstrate that technological artefacts (personal photos, messages, profiles) work to empower students through self construction of personal identities that are true, half truths and even exaggerated.

Similarly, a sense of individualism in online networks was a related hallmark of the cognitively emergent. Students contended that Facebook gave them more scope for choice of friends, to exercise discretion with regards that their audience should know of them:

*It me empowers me because I choose whatever image I want to portray on Facebook. I create boundaries by choosing what I want people to know about me and what not. [...] I have my six best pictures on Facebook that are very gorgeous. I put the best pictures of myself particularly for people who have not seen me in a long time. Like I put out my best foot forward (Interview 11/03/08)*

The above demonstrates that for the cognitively emergent, learning in Facebook was construed more as the articulation of self-identities and constructions of self: “*You know I put the best pictures of myself particularly for people who have not seen me in a long time.*” The egoism in these personal networks is self-evident. To the extent that for the majority students Facebook remained a vehicle for self-identity projection, socialisation, gossiping, and procrastination that consumed their valuable study time, Facebook become a ‘disciplining technology’ (Jarrett, 2008, p. 8).

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<sup>87</sup> Students had a conservative conception of social networking. Although some of them connected with new friends, the majority of students often conceived social networking as the maintenance of established connections and not necessarily finding new connections.

### 6.5.3. Cognitively distal

Like their cognitively emergent counterparts, the cognitively distal learners also maintained a heavy presence on Facebook but unlike them (cognitively emergent), they were not extroverts. I identify with Boyd (2007) who use the term ‘lurkers’ to describe online participants who maintain a persistent but muted online presence. They consistently checked the public spaces on Facebook but never posted anything. The reluctance to contribute in public online spaces could be attributable to other factors other than the lone wolf mentality. These include:

1. Fear of public judgement by peers when one contributes to public online spaces where they could see. Statements like *“There is no one who heard what I have just [privately] asked just now. However, if it was in class, classmates would say “stop wasting our time”[...]* (see citation in Section 6.3.6) probably suggests that that this fear of public judgement could be replicated in public online participation.
2. Culture of silence cultivated in some English schooling system where students usually speak in response to commands from the teacher.
3. Feelings of racial inferiority activated by underprepared learners after asking conceivably ridiculous questions. One student on an ADP when asked whether seating next to someone of a different race in class mattered lamented: *“Yes because there is this thing that certain races are clever[er] and it makes me feel a bit inferior.”* This inferiority complex could have been replicated online, where such students dreaded public participation.

### 6.5.4. Cognitively challenged

Student with these identities were often unclear about the academic purpose of Facebook. They opened accounts only to comply with the course requirements but never posted anything. I call them *“dormant Facebook users”* because their Facebook pages though fully functional, were inactive. Many of them saw the use of Facebook as a waste of time. The statement *“But I think it should be banned from UCT because students sit here, and the internet gets slower. I do not think for people to organise their life is academic [...]”* confirms this negativity. Some of these identities had problems with English as a language of discourse (see Section 6.3.5.1).

The above demonstrates that English language presented itself as a deterrent for some students who had problems of articulation. As the online administrator acknowledged in a debriefing:

Currently, *I think that* second English language speakers *have to understand English and to understand the IT language as well while* these ones [first English language speakers] *are struggling with IT language only* (Debriefing 14/05/08).

As the lecturer points out, second language speakers were linguistically constrained at two levels: the technical jargon (in English) and English as language of communication, while first English language speakers were only challenged by jargon. As such, these differentiations potentially activated different levels of online participation resulting in unbalanced academic relations at horizontal level.

#### 6.5.5. Acolytes/disciples

These students had a learning style that was highly teacher structured, and they had an acoustic understanding of the academic value of Facebook. They were inflexible in their approach to learning-they over-relied on the textbook (DBP 21, and 80), on lecturer's responses to other students' questions on Facebook, on prescribed reading (like the study guide) and did little research to transcend these. They were not versatile enough to engage in online debates or review the materials their peers generated on public Facebook spaces. These students reproduced classroom hierarchical relations by posing as *tabula rasa* to be filled by the lecturer and over depended on lecturers for direction.

## CHAPTER 7

### Analysis of Learning and Power in Human Actions and Discursive practices

#### 7.1. Introduction

In the previous Section, I discussed the learning and power relations that obtained in face-to-face lecturer-student interaction, and the influence of Facebook on interactional power in classrooms. In this Section, I discuss how learning and relational power are manifested in human actions and discourses. To do this, I examine:

1. How lecturer and students' experiences of lecture interactions and Facebook inform understanding of classroom learning and interactional power,
2. How student discursive practices illuminate understanding of the pedagogical models that can best support student meaningful learning, and
3. How student and lecturers' actions and discursive practices in classrooms serve as vantage points for examining the negotiations and contestations of power.

Methodologically, I employ lecturer and students' interview transcripts, transcript of a focus group discussion<sup>88</sup>, and transcripts of in-class lecture observations respectively.

The goals of this investigation are to:

- Unravel how academic relations and learning nurtured in classrooms draw upon SNS interaction,
- Explore the pedagogical models that can best support student meaningful learning in SNE,
- Unpack how power is negotiated and contested through classroom discourses and
- Explore other contextual and structural factors that influence lecturer-student and student-peer interactions in face-to-face academic contact.

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<sup>88</sup> Although two FGDs (Facebook users and non-users) were conducted, I report in this work the findings from one (Facebook users) given my research study's focus on Facebook use.

## **7.2. Review of Analytical Framework**

### **7.2.1. Discourses and Actions**

In Section 3.6.1, I provided analytical framework that guided my study (see Figure 3.2 ). This Chapter is informed by the CTP. I highlighted that the relationship between CTP and CTT is their joint commitment to unearth relations of social and psychological dominance (which I introduced in Section 1.1.2 in Chapter 1). This exposé is conceived by both theories as critical to emancipating humans from subordination and disadvantage often caused by the skewed distribution of power in society. To this end, power is central in both theories' areas of focus. For instance, Brey notes that:

Critical theories of technology are motivated by either political, social, cultural, or religious ideals [...] The central notion in political critiques of technology is undoubtedly the notion of *power*. Definitions of politics often revolve around the concept of power, describing politics as the process of acquiring and exercising power in order to settle collective affairs (Brey, 2008, p. 72).

I interpret that while CTT and CTP all involve examination of power, their emphasis is different. Although CTT examines technological constraints and opportunities that give rise to power in technology-mediated environments, the focus on human relationships is less explicit in CTT than CTP. CTP examines human actions and relations in the exercise, negotiation and contestation of power. Consistent with my argument on power as embedded in social relations, CTP is conceived as a more robust theoretical and analytical framework for the examination power in micro-level settings (classrooms). I discuss two issues below that are central to CTP:

#### *1. Stratification of relations and privileged status*

CTP's focus on the instrumentalisation (the 'how') of power allows for the examination how power is exercised, articulated, manifested and contested. In traditional classroom settings that are directed by authoritative academics, asymmetrical relations may be activated and sustained between academics and students, and between PAS and PDS through hegemonic discourses meant to centralise the conversations around the superior party.

#### *2. Liberation from hegemonic groups /individuals*

CTP proffers a solution for overcoming dominance by marginalised groups. Habermas (1972)'s Critical theory, for example, emphasises self-reflection and democratic participation



as critical to the suppression of social domination: Influenced by Habermas' (1972) view, I infer that self-reflection and democratic communication serve as the cornerstone for disadvantaged learners using SNS' emancipation from the shackles of domination by more intelligent peers and authoritative lecturers.

My analytical framework employs:

1. Burnard's (1991) thematic content analysis to analyse lecturer and student experiences (interview transcripts) of their teaching and learning, and their implications on power relations.
2. A modified analytical framework of Carspecken (1996) and Gowe (2002) to examine the exercise and contestation of power in lectures (observations).
3. Mercer (1996) Socio-cultural discourse analysis to examine student meaningful learning in SNS.

### **7.2.2. Lecturer and student experiences of lecture interactions and Facebook influences on classroom practices**

In this section, I present the findings from 5 in-depth follow-up and 3 closing interviews conducted with lecturers, 4 of whom taught the IS first year classes. The other lecturer was from Film and Media Studies who was studying Mxit, a SNS genre. I also interviewed 5 students on their experiences of the inclusivity of lectures.<sup>89</sup> An MP 3 digital voice recorder was employed to audio record verbatim the interviewees' experiences and an interview script was used to extract them. The interview experiences were transcribed, coded, and categorised.

### **7.2.3. Lecturer's perceptions of factors affecting their in-class interactions**

Lecturers' interview data were analysed thematically and 10 broad categories emerged from the sorting, searching, and analysis of this data. For each broad category, a limited range of sub-categories was developed.

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<sup>89</sup> These were follow-up in-depth interviews in addition to the 50 conducted in the Phase 1 of the data collection process. Of these, three were my case study PDS and two were PAS, all whom were selected from the first Phase interview participants. They ironed out unclear issues raised in the first Phase in relation to classroom relations.

Table 7.1: A Snapshot of a category<sup>90</sup>

Theme and Code	Category	Sub category
Student Quality (SQ)	Student Attitudes	1. Motivation for lecture attendance 2. Gender biases for lecturers 3. Perceptions of dominance 4. Student informal assessment of lecturers

### **7.2.3.1. Micro level Factors**

In classroom contexts (micro level lecturer-student interaction) three principal themes and their corresponding categories were developed. These are:

- a). Student quality (SQ) comprising student attitudes (shown above with sub-categories), student abilities,
- b). Lecturer's characteristics (lecturer's persona), and
- c). Classroom factors ( pedagogical factors).

### **7.2.3.2. Meso level and Societal level**

At the meso level: Nature of the discipline, Academic Transformation Office's support, University publishing policy regime emerged as categories. At societal level the factors that affected interaction were: Apartheid legacy, university policy on addressivity, and perceptions of segregation at societal level. Although these students did not directly experience Apartheid given that the majority of them were born in a post-Apartheid regime, the residual forms of Apartheid manifested in various dimensions. For example, although, the high school system has been de-racialised<sup>91</sup>, subtle forms of racism manifested in middle class and elite schools' enrolment of predominantly historically advantaged students, 2. The manifestations of subtle forms of ostracism, alienation and prejudice of PDS who enrolled in these elite and middle class schools. 3. The feelings of inferiority complex and powerlessness among PDS who enrol in elite schools and HWUs where privileged races were a majority. 4.

<sup>90</sup> A detailed description of all lecturer categories developed appears in Appendix E.

<sup>91</sup> The de-racialisation of schools in post Apartheid S.A. involved an integrated schooling system that is supported by single national Department of Education, funding of schools from the national treasury, and deployment of academic staff across schools nationally regardless of colour.

The stark disparities in schools and universities' resource base despite increased support to historically disadvantaged schools and universities.

After developing categories, the same data was re-searched and analysed to identify some patterns in it and to link empirical data to categories. The following table provides an example of how this was done. The lecturer recounts his experience of teaching first year students during the first semester.

Table 7.2: Analysis of empirical findings

Category	Empirical findings	Researcher 's comments
Course structure	<i>In ICT302F (pseudonym for the course) there were 800 and in ICT102S there were 50. This is a service course, not a compulsory course. Therefore, many students are not interested, they know they are not going to continue with the subject, so it's hard to make them interested. Ok. Most of them see it as a waste of time.</i>	<p>1. Nature of course (optional) dampens student enthusiasm.</p> <p>2. Progression with the course to a higher level is a motivator</p> <p>3. Student motivation is critical to productive lecturer-student academic engagement</p>

### 7.3. Analysis and presentation of lecturers' views

#### 7.3.1. Facebook influence on class interactions

##### 7.3.1.2. Diagnostic purpose

Through lecturer-student and student-peer interactions on Facebook, students shared common issues and problems on the course. One lecturer emphasised the academic use of Facebook (see LB.2 in the Appendix). Although a minority of students participated on Facebook (165 participants) compared to class sizes, academics were able to access informally student understanding from these postings. Students shared discipline-based examples, exchanged IS information with peers and consulted with lecturers on academic matters. To the extent that students adopted these learning resources as opportunities to become accomplished 'experts' in this ICT course, SNS scaffolded student learning. The above address the question: 1.5.4. *In what ways can SNS be used to scaffold student learning in university?*

### **7.3.1.3. Informal grievance handling**

Facebook provided a 'safe haven' where underserved students lodged complaints to lecturers about unresponsive tutors who failed to provide adequate on-demand assistance to students during task execution in the computer laboratories. This is because academic hierarchy often inhibited students from consulting with lecturers face-to-face. The online administrator voiced this grievance handling role Facebook mediated (see second part of extract LA. 1). This way CMC (Facebook) subverted student-tutor asymmetrical power relations by allowing 'hidden' personas to express their complaints more assertively in ways that could not otherwise be possible FTF due to status differences.

### **7.3.1.4. Regulation of lecture activities**

Lecturers reported that Facebook use regulated classroom activities by reducing the volume of questions handled in lectures as the majority of them were tackled on Facebook (see LA. 5 in the Appendix ). Facebook became a mediation tool for regulating the lecturer's teaching strategy in two ways 1. Time redeemed from students not asking mundane questions was supposedly committed to essential objects of lectures, 2. It made lecturers privy of student problem areas as antecedents for lectures, and served as a basis for restructuring lectures by emphasising these areas. This complementation of classroom practice with online learning improved meaningful learning of students. This section addressed Research question 1.5.1.

## **7.4. Other micro-level factors**

### **7.4.1. Course structure**

In-class lecturer-student interactions were also a function of course structure. Foundational courses, which formed the basis for student progression to subsequent academic levels, tended to generate higher student interest than electives. Besides, undergraduate foundational courses were done in privileged high schools; therefore, some PAS were less attentive and uncooperative (see LD. 16 in the Appendix). These PAS often detracted other students from listening to the lecturers. Contact time was often expended on quietening down some rowdy students. Student-peer unbalanced academic relations were subtly reproduced as some attentive students (especially some PDS) were deprived of access to pedagogical content by their peers in mainstream classes. In the ADP, however, Facebook became a basis for student cooperation as issues discussed online were reaffirmed in class. This addresses the question:

1.5.8. What other contextual, meso and macro factors influence lecturer-student and student-peer interactions in face-to-face academic contact?

#### 7.4.2. Massification of Higher Education

The higher education landscape in S.A. has been marked by massification, with huge undergraduate classes as a norm. For UCT in particular, the unintended net-effect of this phenomenon was an over emphasis on efficient transmission of knowledge and an oversight on the equity in learning outcomes. This was apparent in the emphasis on use of multimedia technology for instruction, use of LMS for content transmission, and pedagogical practices that reinforced instructivist teaching with scant opportunities for student collaborative knowledge construction. Huge lectures featured prominently in lecturers' accounts of their undergraduate teaching experiences (see LD. 22 in the Appendix).

On Facebook, similar complaints posted related to limited contact time for asking questions hence less meaningful academic interaction (see DBP 44). All these constraints not limited student apprenticeship into knowledgeable learners but potentially worked to sustain the knowledge gap between academics and students, high achievers and underprepared learners. These micro-level constraints undermined the democratisation of academic relations as students were deprived of opportunities to become active participants in scholarly discourses that were psychologically empowering. This answers the Research question: 1.5.8.

### 7.5. Student Qualities

#### 7.5.1. Student attitudes

In-class interaction was affected by students' motivation to learn. One lecturer highlighted that first years were unbiased and were eager to attend lectures (LE. 1 in the Appendix). However, some lecturers reported strong gender and racial biases for lecturers by these students. Gender biases were evident when students tended to subconsciously accord more respect and attention to male lecturers as compared to females. As one lecturer alluded with regards gender influences on her in-class interactions that:

*These are always perceptions from students' side. For example, if students believe male lecturers have more authority and need to be respected more than female lecturers that perception will exist. It should not, but it is a gender bias probably inculcated in schools, which is wrong. [...] (Interview 6/08/08).*

Gender biases were blamed on South African high schools and the patriarchal S.A. society that worked to reinforce male dominance, which some students subconsciously internalised.

Another IS lecturer shared similar sentiments (LC.5 and LC. 6 in the Appendix). These account smack how S.A. patriarchal relations and gender biases were often reproduced in universities through perceptions of male hegemony.

Discussing how masculinity is deeply implicated in cultural politics, Jackson (1991) observes the different forms through which masculinity emerges as an instrument of domination and oppression-from patriarchal controls over women's bodies and reproductive rights through ideologies of domesticity, compulsory heterosexuality, to social definitions of value of work. The socialisation processes highlighted in lecturer's experiences triggered potentially stratified academic relations as student stereotypes inadvertently entrenched male hegemony. It seems gender biases were neutralised online as students consulted with the female online administrator on Facebook irrespective of her gender. That said, if gender stereotypes were carried online, this could probably explain (partly) the limited number of online participants involved on Facebook. I have addressed the question: *1.5.8. What other contextual, meso and macro factors influence lecturer-student and student-peer interactions in face-to-face academic contact?*

### **7.5.2. Assumed authority in certain identities**

It seemed some students had prejudices for lecturers based on their identities. Being male and coming from a historically privileged race often embodied assumed authority before students in comparison to other identities. For example, whiteness was often conceived by untransformed students to be synonymous with knowledge, intelligence and therefore power. One lecturer affirmed the influence of race in her lecturer interactions with students (see LC 17 in Appendix, and LE. 13 in the Appendix). These preconceptions about white lecturers' academic superiority were coincidentally buttressed by the fact that UCT, as a HWU, has predominantly white academic staff. This unwittingly mirrors the staff demographics in privileged high schools where the majority of learners came from. As such, the biases, which can be interpreted as subtle reconstructions apartheid caste system, were often subconsciously re-enacted by these students. Facebook, as a text-based CMC (with no voice and physical presence of communicants) potentially equalised the educators' status irrespective of race. Recounting his experience of teaching first year classes, one lecturer<sup>92</sup> discerned that students tended to discount his intelligence quotient (see LD. 12 in the Appendix). This account

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<sup>92</sup> The lecturer was from a historically disadvantaged race.

resonates with the first lecturer's opinion that students tended to treat white lecturers with more respect than their black counterparts do. The convergence of these views seems to bear testimony to the fact that student preconceptions about lecturers were deeply tinted with residues of apartheid notions of white supremacy. In his characterisation of formerly white S.A. schooling system, Soudien (2007) argues that while whiteness remains the driving force of these institutions, privilege has reconstituted itself through whiteness in direct relation to new agencies that come with class (Soudien, 2007, p. 52). I argue that gradations in lecturer-student academic relations in class seemed to emerge through students' subconscious biases in favour of formerly privileged races.

Yet in Facebook, all the lecturers were potentially presented as equal partners before students in the online learning environment as identity factors receded into the background. The fact that students were eager to consult with the online administrator irrespective of her identity as a lecturer from previously disadvantaged race,<sup>93</sup> demonstrates that Facebook neutralised racial barriers to communication. I have addressed the question: 1.5.8. *What other contextual, meso and macro factors influence lecturer-student and student-peer interactions in face-to-face academic contact?*

### 7.5 3. Perceptions of 'otherness' and cultural shocks

Although UCT embraces multi-culturalism and inclusivity in its student enrolment and welfare policy, students especially PDS were often disconnected with UCT's elite learning culture. It is not surprising therefore; some PDS described their lecture experiences as: *'Uncomfortable! I felt like I was being thrown to the deep end,' 'the lectures were at a very fast pace,' and 'Yhoo,<sup>94</sup> torture.'* I argue that this disorientation was not only characteristic of the confusion that new university entrants encounter in their transition from high schools, but could also mirrored the clash of the non-middle class learning cultures with the university's elite orientation. One lecturer submitted that this disorientation was apparent among some PDS (see second part of LC 14 in Appendix). This narrative invokes the identity crises that bedevil some PDS as they traverse between different, potentially mutually exclusive environments—their home cultures (marked by poverty and disadvantage) and the elite culture of the university. The discussion above addresses Research 1.5.8.

<sup>93</sup> This is notwithstanding the fact that the other lecturer from a previously advantaged race had a permanent presence on Facebook.

<sup>94</sup> Yhoo is a Xhosa exclamation for something distressing or surprising.



#### 7.5.4. Lecturer Qualities

Lecturers who were more understanding and friendly, more accessible in class and in informal settings were generally more acclaimed by students than those who were more reserved and too formal. Yet the quagmire of being friendly and accessible on the one hand, and maintaining a professional, formal relationship on the other, was evident. One young lecturer emphasised this in reference to addressivity in class (see LE 13 in Appendix). This articulation mirrors the complexity of retaining hierarchical authority in cordial lecturer-student interactions when the lecturer is younger. The lecturer's no-nonsense approach: ***"I am your teacher not your pal"*** is an explicit claim to authority. Explicit authority frames concrete agreements about what rights participants have, what kind of recourse they have if their rights come into conflict with other participants' rights and desires (Hammer, 2006, p. 82). I contend that 'pushing boundaries' implies contestation of relational power with the lecturer.

On the other hand, the statement ***"I am your teacher not your pal"*** sound contradictory given that interactants on Facebook regarded one another as "Facebook friends." It resonates with the dilemma between the lecturer need to be accessible to students on the one hand, and the need to retain authority. This addresses the question: *1.5.3. In what ways do SNS subvert power relations and what are its subsequent effects on lecturer-student and student-peer interaction?*

##### 7.5.4.1. Teaching strategy

In small classes where students were more attentive, and cooperative, the lecturer exercised more authority and they regulated classroom practices through questions and giving responses. Question-based inquiry as a teaching strategy allowed the lecturer to retain control of the class by controlling students speaking turns and who is heard. The leading and directing role of the teacher is manifested in my post-observation debriefing with one lecturer:

It is very difficult to help someone at an individual level in Y [big mainstream class]. For example, in X [small ADP class] today, ***that girl asked 3 questions, so in total I have say 5 question per session.*** I can't have 5 Questions in Y ***I won't have the time because after 2 minutes, they [students] make noise and I spend more than 15 minutes telling them to keep quiet.*** Therefore, if one does not understand something, making that person talk while others are silent is very



difficult. In the X class, they are very cooperative, *there is one person talking at a time* (Debriefing 14/05/08).

I infer that such cooperation and compliance by students from the ADP class put the lecturer in a position of authoritative control and influence. This often allowed teachers to impose authoritative discourses that were meant to direct and support students learning. Because of the advantage the lecturer had in terms of controlling the speaking turns, and silencing noisy students, the use of language was often regulative. The lecturer's use of directive language like: *'If I hear you speak that language again you will go out [...]'* (see Table 7.4) in ADP is symptomatic of this control.

To the contrary, the use of regulative language was less beneficial for the noisy and challenging mainstream classes. The above-mentioned lecturer had to shift the controlling technique from use of regulative language to charm and persuasion to enforce order and control in class. She cited student challenge to hierarchical authority during instruction the mainstream class:

*I gave them a scenario [involving tables] which was false and they were supposed to reason out whether it is true or false, they had to pick that up.* The reason why I created that was that I wanted to show them how to create tables. [...] *There was resistance, student complained about that and there were headaches* (Debriefing 11/09/08).

Authoritative instruction was therefore, difficult to apply for huge less cooperative classes where 'mob psychology' and less respect for lecturers, especially, females were apparent. The lecturer above elaborated that:

Mainstream students are intelligent and more conversant with databases. *Some came to me and said what you were doing is wrong [...]* I said you say so because you are experienced, but we have to start at that level to help others. *They said: Why would you teach us like that? I was so shocked. How can students dictate what I teach?* (Debriefing 11/09/08).

The above points to the lecturer's unease about student challenge to her instructivist teaching strategy. The application of conciliatory phrases like *'Sorry guys, can you please keep quiet'* to retain control of the huge classes (see LE 13) demonstrates this compromise. On Facebook however, it seems the teaching strategy was more influenced by the questions asked and the context of interaction. In this context, Facebook use seemed inconsequential in in-class interactions. The lecturer's teaching strategy seemed more influential. This discussion has given effect to the Research question: 1.5.8.

## **7.5.5. Demographic Characteristics of the lecturer**

### **7.5.5.1. Whiteness and masculinity**

While one lecturer cited individual lecturer personality as a critical factor to defining lecturer-student interactions, the other lecturers emphasised race and gender as significant, give UCT's history as a HWU. Puzzled by student tendencies to respect male lecturers (in my observations), I inquired about the influence of gender on classroom interactions and one lecturer cited disciplinary influences' connection to gender (see LE. 7 in the Appendix). This argument holds for the IS department where not many females had penetrated this field at UCT senior lecturer levels. This answers Research question: 1.5.8.

### **7.5.5.2. Experience ingrained in age**

Four lecturers interviewed isolated age as a fundamental factor that lubricated interactions. The older lecturers seemed generally more respected than younger academics. They were generally addressed by dignified titles and not by first names. As Carspecken (1996) contends, in normative authority, it is obvious that the norms consented to will be features of culture. The expectation that "students should obey teachers" will work only in cultural contexts where this is generally accepted as a sort of moral rule (Carspecken, 1996, p. 131). However this respect for the old was not universally shared. One young lecturer argued that he was better positioned than his elderly counterparts to understand students' needs (see LD 19 in the Appendix). I infer from the divergent views above that age's influence on interactional dynamics could be contextual, and dependent on individual's circumstances. The above has addressed Research question 1.5.8.

## **7.6. Meso-level factors and the skewed structural dynamics**

### **7.6.1. Nature of the discipline**

Lecturers who were prolifically published in the discipline over time often became custodians of the scholarly discourses in the field. They also became recognised figures in their academic community with distinct identities-as authors, academics, knowledge generators, assessors of emergent rival perspectives. As Wenger (1998) contends, a community of practice necessitates: mutual engagement, a joint enterprise, and a shared repertoire (artefacts, discourse, events, and concepts). Through gate keeping practices of new knowledge entrants, they controlled their disciplines and often earned the respect of students and colleagues. The absence of gate-keeping practices on Facebook meant that it created opportunities for

democratising student participation by allowing for amateurish production of user-generated content that initiated students into scholarly discourses. This section addresses Research question 1.5.3.

### 7.6.2. University's publishing regime

Although UCT's aggressive 'publish or perish' policy was a stepping stone for ensuring that academics contribute to high knowledge production standards, paradoxically, the policy created trade-offs with quality instruction. One lecturer emphasised good teaching as instrumental for improving the quality of lecturer-student interaction (see LE. 18 in Appendix). This critique suggest that little investment was put into honing teaching skills of academics. This meant that opportunities for student training to become accomplished experts in the field, and hence balanced academic relations, were undermined. However, an unintended effect of limited valuing for quality teaching was that Facebook emerged as a complementary space where students sometimes bypassed academics (in face-to-face interactions) and engaged with their own knowledge community internationally. Such use of Facebook potentially equalised academic relations by widening students' consultative base and reducing academic dependence. This gives effect to the question: *In what way do academic relations and learning nurtured in formal classroom settings draw upon SNS interaction?*

### 7.6.3. Dissonance in communicative genres and mannerisms

Educational discourses in HWUs are often cast in elite practices and cultural mould and non-middle class students are often distanced from the communicative repertoires and interactional strategies on which they are based. One lecturer subtly acknowledged this:

***I am X [a historically advantaged race] so the interactions that I get are consistent with who I am. Therefore, it might mean that I can't connect well with the examples given by students who are culturally different to me. On the other hand, I also try and use some examples that students can connect with in terms of learning but it might mean that a X student might connect better to my examples or mannerism, culturally than other students [...]*** (Interview 6/08/08).

Because of the dominance of academic staff from formerly advantaged race, students of non-middle class backgrounds<sup>95</sup> might struggle to understand the interactional genres involved. Hence, they may need to be "developed" (meaning patronised), so that they acquire the elite

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<sup>95</sup> These are synonymous with PDS

competencies and mannerisms to effectively function in such settings. My view is, rather than fit into a mould which is not authentic to their ways of psychological reasoning; PDS need to develop strategies of cultural competence. I have addressed Research question 1.5.8.

#### **7.6.4. 'Racialised' relations**

Students often formed racialised clusters during their student-peer interactions in lectures (see LC.9 in the Appendix). This racial awareness is suggestive of the fact that notions of Apartheid legacy were still domicile in the minds of many university entrants. Although not an outstanding feature of student interaction in Facebook collaborative spaces, some isolated trails of racially homogenous discourses were apparent on the Facebook (see WP 36 and 37, and WP 46, 42 and 41). The above addresses the Research Question 1.5.8.

#### **7.6.5. Macro level Societal Dynamics**

##### **7.6.5.1. Apartheid legacy and the school system**

I observe that classroom relations are constructed in a milieu of structural factors some of which are beyond the contemplation of the educators. Relations of disadvantage in university classrooms, I infer, can be traced back to the differentiated S.A. schooling system which subtly reinforces disadvantage, separatism, and prejudice. It seems race continues to be a signifier of relations in elite high schools (from which many students emerged); buttressed by perceivably discriminatory school fees policies, racially insensitive approach to staff appointments and enrolment of learners in ways that subtly reinforce racial homogeneity (see LC.13 in the Appendix). The claims about the discriminatory practices of 'handpicking' black students who 'fit in' the white elite mould resonate with Soudien (2004) who cutely contends that privileged former white schools' approach to the inclusion of students of colour was one of middle class assimilation. That is, practices where children who are not white are encouraged to give up their values, culture, and languages of their homes. I argue that these practices nurtured in private high schools were replicated in university settings through student 'racialised' seating patterns, interactional patterns that smack 'racially' homogenous student-peer relations. I have addressed the question: *What other [contextual, meso and] macro factors influence lecturer-student and student-peer interactions in face-to-face academic contact?*

#### **7.6.5.2. Segregated social environments**

Apart from conceiving segregation as the product of a schooling system that did not adequately encapsulate non-middle class cultural practices, PDS also came from segregated social environments. Their home backgrounds did not adequately support student academic literacy development because of paucity of academic resources, lack of parental tuition, and advice on homework and career choices, and abject poverty that constrained supplementary tutor support. While their enrolment at an elite university (UCT) testifies their capacity to traverse all these background constraints, they however needed to overcome perceptions of psychological and social domination from capable PAS as well. While Facebook presented opportunities for equality of access to instructional and peer-based support, PDS' lack of home access to computers and the logistical constraints of travelling to campus to access the internet, further undermined possibilities for equalised academic relations at student peer level. This answers question 1.5.8.

#### **7.6.6. Student experiences of learning**

##### **7.6.6.1. Working within established networks**

It seemed students had a conservative conception of 'social networking' as Facebook was deployed for conversing more with contacts already established (in high schools, community friends and classmates) than creating new 'buddies.' Working with acquaintances ensured that students were bestowed with emotional, psychological and information support. The fact that only a few students used Facebook to communicate with their parents suggests that many S.A. communities (non- middle class) were still cut out from access to the Internet. It also suggests that much psycho-social support students got during the semester came from their peers who were internet connected. Judging from the capacity of Facebook to extend student academic communities and induct them into knowledge production, many students' conservative notions of networking undercut their chances of liberalising their vertical academic relations. This answers the question: *1.5.3. In what ways do SNS subvert power relations and what are its subsequent effects on lecturer-student and student-peer interaction?*

### **7.6.6.2. Insufficient academic appropriation of Facebook**

Although all students participated on the three Facebook spaces, comparative to other races, black<sup>96</sup> students posted the lowest number posts. Few PDS who participated in this study made reference to consulting with their lecturer on Facebook. This was surprising given the number of learning difficulties many underprepared PDS had and that the IS department had dedicated Facebook as an official ‘help line’ for such learners. This limited academic use of Facebook resonates with a study conducted by Ellison et al. (2007) of 800 randomly sampled Michigan State University undergraduates’ use of Facebook. The study revealed that more than 90% of them used Facebook to stay in touch with and to keep abreast with the activities of long time acquaintances. While I have argued that PDS used Facebook to develop student controlled spaces and to regain social power, the findings were ambivalent. On one hand, though they participated in all Facebook spaces they had not fully developed a knowledge production orientation and despite their learning challenges their total posting were comparatively lower than that of whites. In light of this Facebook did little to disrupt peer-based academic relations. *1.5.3. In what ways do SNS subvert power relations and what are its subsequent effects on lecturer-student and student-peer interaction?*

### **7.6.6.3. Mixed experiences of lectures**

While the instructivist teaching strategies adopted by many staff were critical to steering expert directed support and guidance, some of the learners could have found this one-way delivery and their limited involvement in knowledge production repelling. As one student noted: ***“It was boring to seat for 45 mins [minutes] and watch someone of the same gender as me teach”*** (14/08/08) Yet another gave different remarks on her lecture experiences: ***“Some (lectures) were good but some were very boring. Some kept me interested and some I didn’t understand the work.”***

Although the first concern carries a gender bias, it is also embedded in student disenchantment with playing a second fiddle role in knowledge production in class. While the second concern about limited grasp of content is quite normal for new arrivals in university, the claim that lectures ‘were very boring’ invokes the displeasure some students had with educators becoming ‘sages on the stage.’ In light of student appropriation of SNS and their associated user-centred agency, some students adept with technology could have found

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<sup>96</sup> I mean African blacks and coloureds

transmission approach of lectures too ‘authoritative,’ ‘undemocratic,’ divorced from their everyday self-driven practices and hence disorienting.<sup>97</sup> To the extent that such perceptions affected student motivation to learn, this section has addressed the Research question 1.5.8.

### 7.6.7. Qualities of good lecturers

#### 7.6.7.1. A demonstration by the lecturer of solid grasp of concepts

This whole section on qualities of good lecturers addresses the question: 1.5.8. Students reported that they preferred lecturers that had a fluent, consistent understanding of the content they taught. In their justification of choices for their best lecturer they acknowledged that:

“She *explains very well* and *understands what she is doing*” (Interview 15/09/08).

“She *teaches in a way that you can understand* [the subject] and *in a way that grabs our attention*” (Interview 11/09/08).

Lecturers were expected to unpack complex concepts and technical processes to make them more accessible. The use of context-driven illustrations that students could readily associate with was necessary for in-depth understanding.

#### 7.6.7.2. They slackened the lecture pace for students to understand

The adjustment of the lecture pace was useful for underprepared students’ acquisition of complex concepts, given the volume of content students learnt per session. Explaining the choice of her most preferred lecturer, one student emphasised: “She *lectures at a slow pace so that we all understand the concepts*” (Interview 15/09/08). While the completion of syllabus upon which students would be tested often challenged lecturers to accelerate their pace, swift lectures often undercut student capacity to relate and engage with what was taught. This was a seedbed for asymmetrical lecturer-student academic relations as it reduced learning to passive transmission of content, and knowledge to internalisation of objective facts.

#### 7.6.7.3. They explained concepts in depth and demonstrated care for students.

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<sup>97</sup> I have argued elsewhere that many of the ADP students lacked ICT literacy because of their disadvantaged academic backgrounds. While this was a fact, the alternative view is that some students were being increasingly exposed to emerging technologies like SNS and Web 2.0 technologies in university that allowed for personalised learning and improved their lifelong learning skills.

The novice learners needed more academic support and scaffolding and this meant that the ‘ground rules’ (Sheeran & Barnes, 1991) for these PDS’ learning had to be explicit. Most preferred lecturers were given accolades like: “He *explains well* and *shows that he cares*” (Interview 15/09/08), and: “They (lecturers cited) *explain very well* and *they are approachable*” (Interview 13/09/08). Lecturers were expected by students explain terms in-depth and to be empathetic so that they could be immersed into their courses. It seemed that some lecturers fell short of educating students to enhance critical inquiry but resorted to rote teaching. Rote learning undercut possibilities for student self regulative learning and individual agency, vital for their academic emancipation.

#### **7.6.7.4. They taught with vigour and high determination**

It seemed students expected a diverse range of skills and qualities from lecturers. Some students were more inspired by lecturers who demonstrated vibrancy and energy in their teaching in addition to good articulation of the subject knowledge. Accounting for her choice of lecturers, one student noted: “*They are just different* + [and] *approach the course with life and an active spunk*” (Interview 12/09/08). Another student complemented by noting that: “She *teaches with a passion and explains well and understands what she is doing*” (Interview 15/09/08). I suggest that lecturers who showed great audacity and passion in their teaching often left some imprints on student minds that helped them to reflect easily on what they were taught. This cogitative process was a basis for academic empowerment- in particular psychological power. This whole section on qualities of good lecturers addresses the question: 1.5.8. *What other contextual factors influence lecturer-student and student-peer interactions in face-to-face academic contact?*

#### **7.6.7.6. Towards a Conceptual model of skewed learning environments**

Having given a detailed presentation on lecturer and student experiences of in-class learning and power, and the influence of Facebook on classroom power dynamics, in this section I provided a synthesis of this empirical data. I draw on issues I interrogated to provide a conceptual framework on how prejudice that starts as a societal phenomenon, filters in school and reproduces itself in university classrooms. In reverse order, the model also demonstrates how in-class relations of disadvantage/advantage are a microcosm of the macrocosm (socially imposed disadvantages and prejudices or advantages), where online relations and in-class relations mirror societal forces. Yet I also emphasise that given the complexity of the concept of academic relations and its operations at multiple levels, I am not suggesting a linear



relations of causality nor binarism but rather a recursive, reciprocal and dynamic micro-macro interplay of factors.

To develop this model, I use the following concepts and assumptions as building blocks:

1. Social dynamics in home backgrounds (lack of successful role models in family, limited educational resources, lack of family support on career decisions, and abject poverty), low socio-economic status, and 'cultural capital' (Bourdieu, 1986) all powerfully work to recreate relations of disadvantage for some PDS in the schools and universities.
2. Social practices and cultural values in schools and universities affirm the dispositions and mannerisms of the academically strong, and suppress those of the weak.
3. The relations of disadvantage are built cumulatively in schools as underprepared PDSs progress academically, owing to limited 'mediated learning experiences.
4. Relations of disadvantage for PDS re-emerge in university classrooms through elite language of communication (English), unclear ground rules' (Sheeran & Barnes, 1991), and lecturers' mannerisms oriented towards elite learning culture that draw little from non-middle class cultures and social practices.

Drawing on these assumptions and other broad issues already discussed in this work, a hierarchical system of relations is developed comprising micro level factors (in class dynamics), meso level factors (systemic factors/ institutional level) and macro-level factors (societal dynamics). Before I provide a diagrammatic representation of the conceptual model, a conceptual basis upon which the model is derived is provided below.

**Figure 7. 1: Levels of Analysis and reproduction of relations**

<b>Level of analysis</b>	<b>Conceptual issue</b>	<b>Reproduction of relations</b>
<b>Micro factors</b>		
<b>(Classroom level)</b>	1. Student seating patterns	‘Racialised’ seating patterns enact and reinforce relations of separation (see Section 7.6.4).
	2. Student subconscious biases for lecturers	Racial biases for lecturers create fictitious perceptions of stratification of teaching staff (see Section 7.5.5.1).
	3. Instructional pedagogy	By making ‘ground rules’ implicit for PDS the prejudices enacted in high school are replicated in university (see Section 7.6.3).
	4. Limited good teaching	Teaching that reinforces rote learning reproduce achievement gaps between learners and disempower the PDS (see Section 7.6.2).
<b>Meso level factors (Department and faculty wide)</b>		
	1. Elite learning culture	Elite learning practices and elite academics’ mannerisms reproduce disadvantage for PDSs (see Section 7.6.3).
	2. Department enrolment policy	Students with differential ICT literacy are enrolled (see Section 7.4.1).
	3. Invisible pedagogy	Elite and middle class ‘able’ students’ repertoires and social practices consummate university practices (Section 7.6.3)
	4. ADP	Remedial courses’ focus and gaps in language constrain PDS’ academic effectiveness.
	5. University’s publishing regime	Publishing policy undercuts value placed on good teaching (Section

7.6.2).

6. Transformation office

Need to embed cultural tolerance in transformative learning.

7. Language constraints

English is a middle class language which draws little from native languages. Non-middle class students are most challenged.

### **Macro level factors (Social dynamics)**

1. Digital divide

Non-middle class limited home and 'epistemological' access to computers and the Internet.

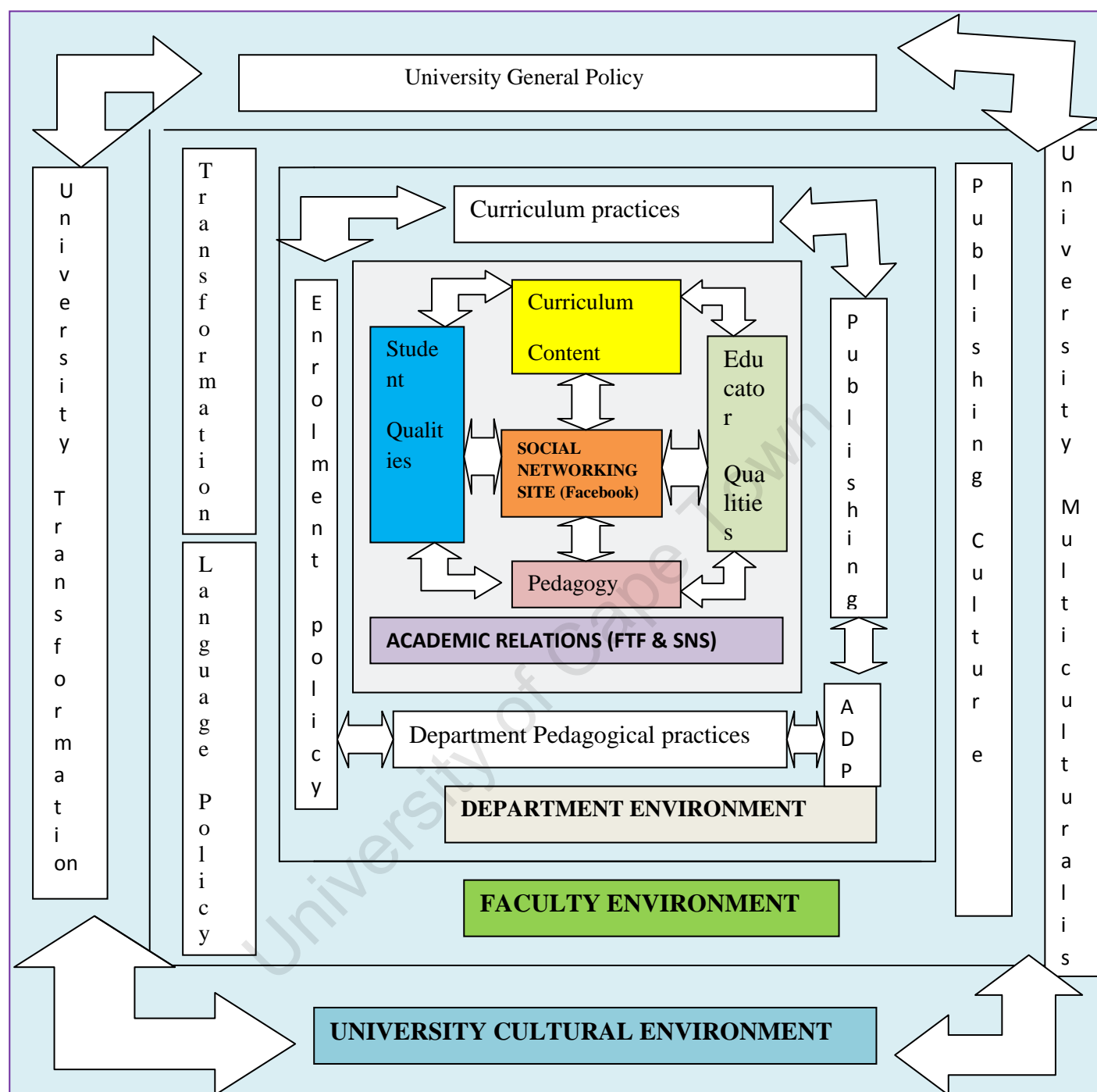
2. Patriarchal society

Male domination of position of power reinforces university entrants' gender biases (see Section 7.5.1).

3. Cultural deprivation

Limited cultural capital for PDSs class to guarantee academic preparedness and academic success.

**Figure 7. 2: Conceptual model of University learning relations**



### **7.7. Focus Group Discussions (FGDs)**

In this Section, I discuss the discursive practices that emerged from four students' Facebook experiences and how their learning relations were impacted by this use. I moderated these conversations and used a digital voice recorder to audio-record the interactions (for venue

and duration see Section 4.7). The discussion was later transcribed, and analysed using Mercer's (1996) socio-cultural discourse analysis.

In this section, I provide answers to the questions:

#### *1.5.5. What pedagogical models can best support student meaningful learning in SNS?*

To do this, I discuss the genres of talk that manifested in focus group discourses and the emerging themes identified.

### **7.7.1. Cumulative talk**

#### **7.7.1.2. Socialising technologies**

Maintaining contact with friends was reported as one of the prime reasons for student use of Facebook. Extroverts used Facebook for social networking activities ranging from keeping in touch with friends, exchange of photos and invitations to poke<sup>98</sup> online. One student noted connectivity as important:

Simon

013. *I think I talk a lot and I have befriended quite a number of people* over the years and I think Facebook is the only way *I can keep in contact with people*.

The social side of Facebook (social networking) implies that lecturers could take advantage of this embedded practice to integrate some conversational, reflection based technologies (for example blogs) into their Facebook learning activities. Therefore, developing authentic tasks that integrate individualised knowledge production and social practice of conversations (collaborative knowledge production) would motivate self expression and self reflexivity on the one hand, and mutual exchange of views in collaboration, on the other. Pedagogically, reflective blogs and personal e-portfolios could be seamlessly integrated into Facebook's social activities through requiring students, for example, to reflect on IS related issues.

Complementing the aforementioned student, a peer also cited maintaining contacts as a central part of her SNS use:

Anita

014. *I use it [Facebook] to communicate with my friends who are overseas because it's easier to write on one's wall than to write an e-mail. I use it to keep*

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<sup>98</sup> Poking means to arouse emotionally (through a sensitive conversation) or in a sexually suggestive way (for example, dating).

*in touch*. I frequently communicate with maybe six [friends] but I have about 100 'Facebook' friends.

Socialising thus dominated the use of Facebook- walls conversations and the communicating with acquaintances. I infer that corporeal character of Facebook is quite important given that "college student population (the original incarnation of Facebook.com)" (Ellison et al., 2007, p. 1143) with university e-mail accounts needed to tightly integrate their social lives with their academia through participation in networked communities. The relational facet of Facebook is affirmed by another interactant:

Shalom

016. I use Facebook quite a lot at home because I have internet access at home. I am on Facebook at least an hour a day. I write a lot of people, *I write on someone's walls so I use it most for keeping in contact with people. I use the photo applications*, I am sometimes invited to poke, but i don't participate in these things.

Students articulated their identities through exchange of photos on Facebook. If learning can be conceived as belonging, then sharing photos in a community with mutual interests constitutes one such. Influencing the academic quality of content shared while keeping the playful aspects of Facebook would improve the academic networking without necessarily diluting the lightening moments in Facebook.

#### **7.7.1.3. Academic networking on Facebook**

Cumulative talk on academic use of Facebook mirrors student attempts to engage in lifelong learning to compensate for what universities often fail to do, that is, to extend discourses beyond institutional boundaries. As Artwell (2007, p. 9) contends, the challenges of universities "at a lifelong learning level" have been the "limited discourses and failure to support the broadening of opportunities for learning to wider sections of the population." One student emphasised that:

Bernard

045. *I use Facebook to read the News 24 headlines and read the Mail and Guardian, it's pretty educational. We also had an IS tutorial group on Facebook. It was quite useful because we had to do a lot of presentations run from there. It was useful although it was difficult to have six people all logged on Facebook at the same time.*

While Facebook peer-based tutorial group was academically useful, the challenges of arranging a group meeting that met in real time demonstrates that informal learning on SNS may be directly influenced by resource constraints. Availability of interactants, and connectivity, motivation to learn, and capabilities of the learner (that may include the level of skill or awareness to interpret, analyse, and critically reflect on situations (Marsick & Watkins, 2001) all affected online interactions. Synchronous peer-based interaction would allow for direct engagement and multiple perspectives in context critical to the construction of collaborative self knowledge.

Another participant highlighted her academic research on an international Facebook group on software development related issues:

**Anita**

046. I actually think Facebook has some kind of academic value for me *when I do my research on open software development. I am part of a group on Facebook which is cool because it's international, people are always putting up new information and discussing current issues, so it's invaluable for me.* It's very current and it puts me in touch with people all over the globe doing the same things as me.

International networking, permitted the development of inter-cultural exchange of views permitting the building of complex knowledge structures based on student experiences and perspectives. I infer that pedagogical models that seamlessly integrate international online networking with lecturer content would be useful for enhancing the academic value of Facebook. Conscious of PDS' need for cognitive scaffolding, and drawing on the empirical data above, I suggest a learning model that would involve inter alia, the following:

- *A focus on authentic tasks in SNS*-A discursive framework that combines individual knowledge production and social networking practices students are participating already in. In light of the dominance of SN on Facebook, influencing the academic content (for example, web links to online websites, news feeds from academic websites, scholarly readings) of SNS would shift social interaction towards academic networking, that improves collaborative discussion of IS theoretical issues (see Section 7.7.1.2)
- *Persuasion of students to meet in real time for knowledge-based academic discussions*-Synchronous Facebook discussions on IS issues and tasks would allow

students to exchange views and perspectives in real time and allow personal knowledge exchange among collaborators. The need for synchronous discussion is alluded to in one student's view (see first student citation in 7.7.1.3).

- *Inbuilt assessment strategy for personal as well as peer-based evaluation of knowledge and critical thinking* would be necessary for students to gauge progress as well as a basis for formative assessment. The social interaction on Facebook by students interviewed with limited opportunities for critical engagement meant that scope for student training into more accomplished experts in the ICT discipline were undermined (see second and third student extract in Section 7.7.1.2). As such, a process that supports formative self-assessment of personal thinking and collaborative generation of ideas is useful for supporting critical thinking. For example, short quizzes and discussions based on topics covered in class with an automatic marking system for self assessment, and evaluation criteria for assessment of critical thinking in online discussions by peers would be useful.
- *Allowing for international cultural collaboration through global networks* that engage in real time synchronous classes on Facebook would empower students to look beyond their immediate classroom environment for knowledge generation, critical enquiry and engaging debate (see second student extract in Section 7.7.1.3).

The exploration of intercultural collaboration presents an opportunity for scholars and students to investigate the complex relationship between structure (that is, context and setting) and agency (situated activity and self) (Basharina, 2007, p. 37).



## 7.7.2. Disputational talk

### 7.7.2.1. Personalisable working spaces

FGD participants disagreed on transparency in SNS-where the action of a network member becomes visible to other peers within that network. The other communicant can be updated that they are no longer ‘friends’ through the status update notifications. This visibility, as one discussant suggests, results in Facebook fostering fictitious relationships:

Simon

022 I guess Facebook nurtures these fake friendships-friendships that are not really tangible. *The issue with physical interactions is that you can meet new people and then later realise that they are not that interesting and you move on but with Facebook you can't go and delete, I guess it will seem awkward* although it happens to me all the time.

This view is consistent with Richardson (2005) who argues that relationships on SNS facilitate falsified imaginary relationship, in many cases fictionalised, or at the very least embellished individuals. The other focus group member disagrees arguing that one's Facebook page is a personalised working space where the user has more leverage in terms of which friends to keep in his/her network:

Shalom

023 *If they [new Facebook friends] turn out to be boring I delete them. I think Facebook is a personal thing [space], you have got your profile there, your photos, and people writing on your wall, it's quite personal thing.* If you don't want to let people see your profile, *you can hide it because people, it's none of their business.*

It is this interoperability and the transparency of connected web pages that brought outrage on this company (Facebook.com) from Facebook users in 2008 who critiqued Facebook for its lack of privacy and surveillance.<sup>99</sup> due to status notifications. That said, the student comment above resonates with Kerr's (1982) view that CMC offers the individual the choice of when to facilitate communication, an increase [or decrease] in connectedness and blurring the distinction between work and pleasure (words in brackets added). This newfound freedom in SNS presents' itself as the basis for psychological empowerment of students with low self-esteem especially PDS. Education on the use of Facebook privacy settings may allow

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<sup>99</sup> [http://en.wikipedia.org/wiki/Criticism\\_of\\_Facebook](http://en.wikipedia.org/wiki/Criticism_of_Facebook)

interactants to collaboratively network on academic matters yet protect their information from intruders.

#### **7.7.2.2. Disruptive use of SNS-‘participatory surveillance’**

Students presented different perspectives on their use of Facebook. One student cited communication with distant peers as central to her interaction. This kind of use resonates with the established fears that Internet use would weaken immediate personal ties through intensifying communication with distant, far flung communities (Quan-Haase, Wellman, Witte & Hampton, 2002). This orientation towards distant friends is mirrored in this student’s use of Facebook:

**Anita**

014 *I use it to communicate with my friends who are overseas because it’s easier to write on one’s wall than to write an e-mail.* I use it to keep in touch.

Dystopian views emphasise that the Internet fosters a decline in social capital and increases interpersonal alienation. For example, a longitudinal study of ‘newbies’ (newcomers) to the Internet found that high Internet use was associated with lower social contact offline (Kraut et al., 1998).

Another student emphasised a completely different aspect of Facebook use. He indicated that he used Facebook for gossiping:

**Simon**

015 [...] I recently deleted all my applications. I was not getting into it. *I found out that I could say I want to log on for 20 minutes and I would sit there the whole day and wolf bite somebody* [...]

The disruptive nature of Facebook use is manifested in this student seating ‘the whole day’ gossiping on other student’s private life. The disciplining nature of technology is manifested in this unproductive investment of precious academic time. This way, Facebook became a ‘disciplining’ technology that propelled unbalanced academic relations by presenting itself as an instrument for student manipulation and rational control.

Another student narrating of her conduct on Facebook dissociates herself from gossiping but uses Facebook for prying.

**Shalom**

016 *I don't do wolf biting on Facebook like Simon does. Basically, I know all of my friends so I use Facebook to check what they are doing.* When I started I was very excited and I was inviting everybody whom I knew and *basically I am interested in what they are doing on a daily basis.*

The checking of peers' activities online supports Quan-Haase and Wellman's (2004) view that rather than weakening community, the Internet supplements existing face-to-face and telephone contact. My view is that an academic community that is unbound by space-time limits unfolds as students can interact anywhere, anytime, with peers through the exchange of information and perspectives. This 'checking' on what friends are doing constitutes a form of surveillance that is potentially rewarding- called "participatory surveillance" (Albrechtslund, 2008). By tracking the educational activities their peers are engaged in, I argue, students are better equipped to access informally their peers' modes of thinking with a view to position such thinking against their own.

### 7.7.3. Explorative talk

In the following conversation, a self proclaimed elite student explains how being transferred to a remote mission school by his father [after some misbehaving] became a humbling experience that changed him into a more down-to-earth person. He describes how he can now intermingle with perceivably lower status people on Facebook:

Simon

037 [...] *Like at the end we were conversing in Shona [vernacular language] which was the medium of communication and thus how I got connected to people from low backgrounds.[...] Now I can interact with anybody even the security guards.*

Although his life changing experience is coherent, the other student challenges its basis. He argues that this experience through sensible does not warrant him to converse with the security guards on Facebook given the stratified nature of Internet access in South Africa:

Bernard

038 You have raised an interesting point *but security guards will never be your friends on Facebook because internet access in SA is skewed in favour of the elites and social time to spend with security guards on Facebook doesn't just exist. The nature of the internet in the South African is too elite that it becomes difficult to develop online relationships with other classes.*

The development of perspectives and counter perspectives is the basis for socio-constructivist construction of knowledge in explorative talk. I interpret the geographical divide to be

another manifestation of the digital divide as the affluent societies are mostly congested in these affluent cities and poor communities are mostly in the rural areas. With regards access to the Internet and Facebook, many PDSs did not have them in their high schools, which happened to be concentrated in the poor communities of South Africa.

After a constructive critique based on facts, the first student reconsiders his statement:

**Simon**

The point is I befriend people from middle classes and lower class but then they are completely nonchalant about the use of Facebook. For them it has no value and you will be the only one in this group of friends who is using it. However, for many who come to UCT, Facebook is not an option.

Conscious of the digital divide that still plagues S.A. and the fact that UCT enrolls PDS, there is a reasonable justification for pedagogy to be designed in ways that are conscious of this stratification with regards computer and Internet access.

#### **7.7.4. Analysis of Power relations in the classrooms**

##### **7.5.4.1. Observations in the ADP and Mainstream classes**

*1.5.1. In what way do academic relations and learning nurtured in formal classroom settings draw upon interaction in SNS?*<sup>100</sup>

##### **7.7.4.2. Analysis of power strategies used in lectures**

The following are selected extracts that demonstrate how an IS lecturer who taught an ADP class exercised different strategies (codes) of power in classrooms.

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<sup>100</sup> This question is an inversion/ or reverse of Research question 1.5.1. The current question examines the classroom power relations and the extent of influence of Facebook on these relations.

Table 7.3: Case 1: Transcription of an ADP lecturer

Empirical evidence	Code	Researcher's Comments
L: ...So page 1 <b>we are going to do</b> 1, page 2 cancel it we won't do it, page 3 <b>we are going to do it</b> , page 4 cancel it out, and <b>we are going to do</b> page 5. [...] Is that clear hee?	' <b>We are going to do that...</b> ' is a normalising (requiring) statement	The lecturer requires students to do tasks. Dispositional power is manifested by lecturer's capacity to assign tasks.
Class: It's not. ( <i>They seem to have heard that but they are just buying time.</i> )  L: <b>You people</b> have been seating here and you still say it's not clear?  C: ( <i>The class begins to grumble, others are trying to ask questions, but they can't be heard as their voices are submerged in the noise</i> ).  <i>One [colour reserved] male student shouts nxa! which seems to be a remark directed at the lecturer</i>  L: <b>You are out of order.</b> ( <i>She commands this noisy boy in the central row who gave the remark</i> )	Mischief by students  ' <b>You people ...</b> ' is totalising  Grumbling  Nxa! is an offensive remark  ' <b>You are out of order</b> '- has a regulating effect	Students wrestle power from lecturer through buying time.  ' <b>You [...]</b> ' creates a hierarchical structure – one of 'you' and 'me.' It shows differentiation of identities in a superior-subordinate relationship.  Grumbling is a way of challenging lecturer's control and directives.  Offensive remark seems deliberately intended to resist regulation by the female lecturer.  Lecturer reaffirms her control by enforcing a rule on use of appropriate language in an academic setting. .
L: She repeats herself. Page one, its PROJECT 3.1 and <b>we are going to do it so tick it.</b>  S: ( <i>One [colour reserved] male student shouts tick!</i> )	' <b>You are going to do it</b> ' is normalising (requiring) and ' <b>tick it</b> ' is requiring  The erratic shout is disruptive	Lecturer assigns duties to students. This is dispositional power (Clegg 1989) Lecturer's control by normalisation  Attention of the class is a resource necessary for lecture progress. Students use mischievous tactics to

<p>L: Cancel page 2 because it is a repetition</p> <p><i>The boys shout no! no! others say how?</i></p> <p>L: Cancel it, to do it is stupidity. Page 3 you are going to do it. <i>Same [colour reserved] male students shout no! no!</i></p> <p>S: (That [colour reserved] male student shouts nxa! again<sup>101</sup> –an offensive remark).</p>	<p>Disruptive remarks to resist a requirement</p> <p>Distractive remarks</p>	<p>wrestle attention of other students away from the lecturer.</p> <p>Disruptive remarks are as a strategy of negotiating and wrestling power from the lecturer.</p> <p>Power contestations between the male student and the lecturer.</p>
<p>L: <b>My friend</b> when you come here <b>you don't come just to learn academic work alone you must learn good manners as well. When you have a lecturer in front of you don't do that ah-ah</b> (to say no! no!)</p>	<p>'<i>my friend ...</i>' shows 'condescension' (Bourdieu 1991)</p> <p>'... <i>you must learn good manners as well... "..."you don't do that"</i> has a regulative effect.</p>	<p>It is a subtle negation of hierarchy deliberately intended to mask the hierarchical power structure.</p> <p>The reprimand of the student demonstrates the lecturer's <i>normative power</i> (Carspecken, 1996) and control of the class.</p> <p>The cultural norm is that the teacher should be respected.</p>
<p>Class :Laughs (<i>They laugh at the reprimanded student</i>).</p>	<p>Exclusion</p>	<p>Students have control over other students by dissociating themselves from inappropriate behaviour.</p>

(Extract of an ADP class observation transcript of 9/04/08)

### 7.7.4.3. Discussion

The discussion above is dominated by normalisation and regulative discourses. The lecturer regulates lecture flow, speaking turns and directs student academic conduct in class thus demonstrating her normative authority (Carspecken, 1996) in relation to students. Yet

<sup>101</sup> 'Nxa' is an offensive expression in vernacular languages like Xhosa, and Shona that expresses intense boredom and disgust at something. It is normally accompanied by scornful words.

students devised ways of subtly contesting this power through grumbling and other disruptive remarks aimed at negotiating and wrestling control. One male student contested this power by hurling offensive remarks at her twice. The patriarchal nature of the S.A. society seems reflected in this male student's gender biases embodied in- his disregard for female authority twice. Yet the consented cultural claims in S.A. culture of showing respect for older people and authority restrains the mischievous student. This is manifested in this student's ridicule by his mates that restrained his behaviour. On both occasions, the lecturer effectively applied *regulative* techniques to exercise control over the student.

Table 7.4: Case 2

Empirical evidence	Code	Researcher's Comments
Lecturer: No, I would like to make a report. [...] I cut on my sales, and I cut on these expenses  [...] <b>Did you understand the process?</b>	Surveillance—she is diagnosing student understanding	1. The question serves a diagnostic function tool
L: Suppose. <b>Who is going to take this one? Sweetheart</b> ( <i>She picks on a [colour reserved] male student</i> ) Come over here and change the credit cards. The scenario here is that no one will now use credit cards.	The question is regulating  ' <i>Sweetheart</i> ' is 'condensing' (Bourdieu, 1991)	1. Lecturer regulates the lecture flow by controlling speaking turns. 2. She concomitantly cedes power through peer- demonstration  1. Use of this affectionate term is condensing. 2. It masks hierarchical power difference between the interactants involved .
( <i>A round of applause is given. It is instigated by the [colour reserved] males guys in the middle row- and they shout Professor! The applause seems sarcastic</i> ).	Exclusion	1. Students exercise power over a student by ridiculing perceivably 'weak' students. 2. Less potent minds are punished.
L: <b>Why do you run on rampage in class?</b> ( <i>Students giggle lowly</i> ). The credit cards must go. No one must own a credit card ( <i>She advises the student picked on. The boys start speaking in Xhosa. The words seem</i>	The question is normalising (defining the normal)	1. Lecturer defines the normal by requiring students to behave in class

<i>directed at the student raised).</i>		
L: <b>Why are you guys speaking in that language?</b> ( <i>Students laugh again</i> ). <i>If I hear you speak that language again you will go out. [...]</i> <b>Please don't use them</b>	The question is normalising (confirm to a standard)  <b>'...you will go out'</b> is as a regulative sanction (Invoking a rule)	1. Lecturer uses dispositional power to enforce the University rule of use of English as the language of discourse in lectures. 2. She threatens the students using a sanction.
L: <b>So why are you guys aren't using Facebook?</b>  S: We use Facebook!  L: Apart from asking me to do something for you what else do you use it for?	Surveillance (closely observing)    Investigative follow-question	Lecturer noted anomalies in terms of PDS' participation in Facebook use..
S: One [colour reserved] male student says: <b>We use Facebook to court</b>	Student jokes	Students negotiates power through humour
L: <i>That is out of order.</i> ( <i>all the students laugh</i> )	Regulation by rule.	1. The teacher reaffirms authority by correcting a behaviour that may influence others.  2. The department had appropriated Facebook as an educational tool
Bob: <b>It wasn't supposed to be</b>	Student tones down t a tense atmosphere	1. The lecturer re-territorialise control as the students bows down.

(Extract of an ADP class observation transcript of 19/03/08)



#### 7.7.4.4. Discussion

The lecturer enacts control of students through several codes aimed at control and regulation of lecturer-student relations. Surveillance manifests in her use of a phrase aimed at diagnosing student understanding: ***“Do you understand the process?”*** This is consistent with the dispositional authority of the lecturer to assess student understanding as a basis for providing appropriate pedagogical interventions. Similarly, surveillance (closely observing) is embodied in her question: ***“So why are you guys aren’t using Facebook?”*** It shows that she had closely observed wall and Discussion board observations and had noticed limited participation by PDS. The male student’s ‘joke’ that he used Facebook for dating, shows student attempt to subtly negotiate power. The lecturer contests this move by reprimanding the student with a regulation: ***“That is out of order.”*** The influence of Facebook on in-class practices is manifested in the lecturer’s reference to it as an academic support resource. This addresses the question: 1.5.1. *In what way do academic relations and learning nurtured in formal classroom settings draw upon interaction in SNS?*

The lecturer directly regulates the speaking turns and classroom discourse by picking on a student to demonstrate a technical process: ***“Who is going to take this one?”*** phrase. At the same time, this picking on a student also constitutes an attempt by the lecturer to level academic relations between herself and students through delegation of authority to students for task execution. This also demonstrates the negotiable nature of power and that power is not a resource in the hands of the privileged elites. Students also negotiated power directly with the lecturer through making disruptive noises. The ***“why are you on rampage?”*** question serves a normalising function of conforming to a standard of requiring order in class and silencing unprivileged voices that are disruptive. The lecturer also exercised dispositional authority through requiring students to use English and forbidding the use of vernacular languages. Dispositional power (Clegg, 2008) was manifested by the threat of sanctions that the academic authority used to demand compliance from the students: ***“If I hear you speak that language again you will go out.”***

#### 7.7.4.5. Emergence of vertical peer-based relations in horizontal discourses

Attention of the class was also a resource that was contested between the students and peers, and students and the lecturer. The taunting shouts: ‘Professor!’ at the perceivably weak student who struggled to solve a problem (as a peer-demonstrator) in Access exhibited

student attempts to shift attention from the lecturer. This tendency to calibrate peers' perceived intelligent quotient constituted part of the wider strategy by students to exercise their power on fellow students thus potentially creating a hierarchy in peer relations.

#### 7.7.4.6. Facebook's effects on learning relations of students and lecturers

In this section, I discuss Facebook's influence on classroom interactions using a modified version of Carspecken's (1996)<sup>102</sup> analytical framework.

Table 7.5: Facebook influence on classroom interactions

Interactional Patterns	Lecturer initiates interaction	Students initiates interaction
<b>Reference to Facebook</b>	<p><i>[Facebook is mentioned just as a resource for receiving answers to student questions ]</i></p> <p>[Example: Obs 11]</p> <p><b>L: ...<i>One issue I want to note is that I am always on Facebook.[...]. So call on Facebook. It's not embarrassing to use Facebook. [...] I want you to use it for explaining your educational problems not dating.</i></b></p> <p><i>[Facebook is cited as a space for expediting learning through consultation and common problem solving]</i></p> <p>[Example: Obs 14]</p> <p><b>L: [...] <i>Second, you need to talk to me on Facebook. Otherwise my friends, I cannot be talking to more than 700 students [...] but on Facebook because if</i></b></p>	<p><i>[There are attempts to prop student reflection and develop common understanding]</i></p> <p>Example: Obs 15</p> <p>S: What do you mean?</p> <p><b>L: <i>For example, the last time I saw Facebook you were complaining to me about literature reviews.</i></b> You are supposed to do this, which ever topic you are given, for example What is IS? What do you need to do?</p> <p>S: Generate some information.</p> <p><b>L: What kind of information? First you think of information, you think of Information processing [...]</b></p>

<sup>102</sup> It is important to note that the application of power happened in different lecture contexts and different lecturers applied power strategies differently. As such, certain features of Gowe's (2002) analytical framework would be more dominant in one scenario, while issues emphasised by Carspecken (1996) could be more prevalent in other settings. As such, I show scenarios where either analytical constructs were applied separately than mixing them.

	<p><i>he has a problem, you find that you also have the same problem.</i></p> <p><i>[...] So I answer him on Facebook but you don't go to Facebook you will not know the answer. So please go on Facebook]</i></p>	
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In the discourses to the left column above (authoritative teaching styles), the lecturer initiates and leads the discussion on her presence on Facebook and the need for students to consult with her via this platform. In this interactional style, asymmetrical lecturer-student academic relations emerge as the superordinate actor (lecturer) subtly constrains the contribution of the subordinates.

To the opposite of this discourse is a different interactional mode where the students initiate interaction and the lecturer props student reflection and seeks to develop mutual understanding. This discursive genre had a propensity to create more democratised academic relations as there is a shift from canonical text-based interaction (predetermined and hierarchical) towards more scope for student generation of self knowledge. The lecturer's statement that: "*the last time I saw Facebook you were complaining to me about literature reviews*" demonstrates that in-class interactions directly drew on classroom instruction. The above addresses the question: *1.5.1. In what way do academic relations and learning nurtured in formal classroom settings draw upon interaction in SNS?*

#### **7.7.4.7. Relations of interactants**

Role play gave rise to two genres of duelling discourses one in which the lecturer assumed a fixed and dominating position in student learning, and another, where there was collaborative exchange of views and critical questioning to arrive at more informed understanding. In fixed and authoritative role-play, the lecturer remained the main source of information and opportunities for engaging in discussions were often lost. In the flexible and collaborative role-play, the students asked critical questions that opened up new possibilities for both parties to reflect and generate new understanding (see empirical example 1 on the application of roles in Appendix C-(after the observation framework)).

### 7.7.5. Classroom Contexts and student social power

#### 7.7.5.1. Seductive power

In contrast to the small classes were *causal power* (Clegg, 1989) (like invoking rules, threats of the use of sanctions, surveillance) was effectively and easily enacted, for the bigger classes this form of power was less effective as it was openly challenged by the students. Instead, a concessionary approach involving ‘seductive’ power to mask control and authority was adopted by some lecturers (especially females) in a bid to retain control of lectures with students in excess of 450 (mainstream classes). Students demonstrated considerable power through the *herd instinct*-what is euphemistically called *mob psychology*. The lecturer employed a different approach to canvass learners’ cooperation namely, persuasion, charm, and concessions to ensure that the lecture sessions continued unabated. One example of an observation transcript involving students’ mob psychology and the lecturer’s exercise of a conciliatory approach to power and class management appears as an addendum (see empirical example 2 on the application of conciliatory power in Appendix C (after the observation framework)).

## **CHAPTER 8**

### **Discussion of Findings**

#### **8.1. Introduction**

In the previous Chapters 5, 6, and 7, I presented my research findings on the relationship between Facebook interaction and face-to-face interaction and how power relations and learning play out in both spaces. In Chapter 5, I analysed lecturer to student, and student to peer Facebook postings as ‘windows’ to grasping how students learned and the relational power struggles that unfolded in these interactions. In Chapter 6, I explored the learning and power relations that obtained in lecturer to student and student to peer interaction, and forms of influence of Facebook on classroom learning activities and interaction. In Chapter 7, I examined lecturer and student experiences of lecture interactions, student discursive practices in a FGD, and students and lecturers’ actions and discursive practices in classroom context to explore how interactional power and learning manifested in human actions and discourses. In this Chapter, I discuss each of the findings from these three Sections consecutively. The purpose of discussing chapters consecutively is to show how each piece of evidence helps in addressing the research questions in addition to ensuring a logical flow of discussion.

#### **8.2. Discussion of learning and power in Text based interaction**

In this section, I discuss, two issues: 1). Learning and mental transformation produced by discourses in text-based interaction, and 2). How interactional power was manifested, articulated, and contested in discourses.

##### **8.2.1. Mental transformations and scaffolding**

Facebook interactions presented opportunities for shifting student conceptions of learning. Students held unsophisticated notions of learning as serialised, acquisition of knowledge. Their discussion on academic value of weekly quizzes they wrote in computer labs exposed these misconceptions. Students expected quizzes to reflect the cumulative flow of lectures (see WP 46 in Section 5.3.1.2). They complained about the incongruence between quiz topics tested and lecture content covered, and the quiz questions’ generic nature (see WP 41 in

Section 5.3.1.2). Given the complexity of knowledge construction, this acquisition mode seemed problematic. As Gamache reiterates,

University students often find tertiary learning complicated because they have an inappropriate conception of what learning is and involves, see knowledge as external, objective ‘body’ of facts, and learning as the passive absorption of this data” (Gamache, 2002, p. 277).

While passive information transmission could be essential in certain knowledge domains to form a frames of reference for procedural knowledge acquisition, it is criticality and informed judgement that unlocked mastery of IS discourses. I expressed the limitations of transmission approaches for student self-regulation and collaborative generation of knowledge (see Section 1.3.4.3). The lecturer challenged serialised conceptions of learning (see Section 5.3.1.2) and advocated for an eclectic and integrated approach to learning. She presented an eclectic process where diverse information and perspectives taught would be systematically integrated into a complex body of knowledge applicable across diverse contexts. I infer that students’ perspectives on learning (as serialised) were transformed by the lecturer’s alternative perspective. Shifting perspectives, relates to the conceptual change and recognition of other viewpoints as relevant and valid (Palonen, Hakkarainen, Talvitie & Lehtinen, 2004). As such, the lecturer’s flexible approach conceivably shifted students’ epistemic frames by presenting an alternative approach to learning. This answers the research question: *1.5.7. How are students’ epistemic frames shifted by lecturer-student and student-peer interaction in SNS?*

## **8.2.2. Facebook’s impact on scaffolding**

### **8.2.2.1. Nascent networked learning culture**

The embryonic traces of student networking on Facebook insinuates their realisation of the significance of ‘learning networks’ for information sharing. Students discussed with peers issues ranging from course administration, task execution (for example, see Section 5.3.2.1) to micro-level management of their daily lives. In these [learning] communities, learners participate actively creating and sharing activities, learning plans, resources, and experiences with peers and institutions (Koper & Sloep, 2002). Networked interaction with peers on Facebook enhanced their access to collectively generated resources, academic support, and background information on task accomplishment.

Online participation was stratified and involved these layers: *a) dormant b) lurking, c) corporeal, d) acquisition e) engaging-transactional layers*. These layers are based on student

identities discussed in Section 6 (see Section 6.5.1-6.5.5). It is the engaging-transactional layer that was most academically useful as it often triggered explorative talk.

Networked learning cultures are at the centre of the development of user-generated content characteristic of Web 2.0 technologies. It was through engagement with content, provision of background information as academic problems, and developing shared perspectives in learning networks that both teacher-dependent and peer-supported student learning was scaffolded. This answers the research questions: 1.5.4. *In what ways can social networking environments be used to scaffold student learning in university?*

#### **8.2.2.2. Surface approaches to learning**

Student discussions in Facebook public spaces expressed several limitations of student-lecturer interaction in class. For example, students in their discussion of the academic value of quizzes expressed the limitations of transmission pedagogies (see DBP 22, 21 and 19 in Section 5.3.3.2). I briefly discuss each of them in turn:

a). Teaching approaches that emphasise ‘rote’ learning and not transformation were alluded to in the quotation: “... *Lecturers put no emphasis on what is important instead they rumbled on and it is impossible to remember everything they said*” (DBP 21). Because of limited contact time, there was often a trade-off between syllabus completion and meaningful engagement with students. Rote learning is embodied in the emphasis on *memorising* (“*remembering everything they said*”) content and this invokes the view that lecturer-student interaction was often less productive. As Karpov and Haywood (1998) suggest, rote skills are meaningless and non-transferable and that is why students should develop their own empirical knowledge to deal with the subject domain problems. My views however, is that for first year learners developing their own knowledge could be hard and may need lecturer support in critical thought to do so.

b) Limited scope for experiential learning is vivid in the statement: “... *trying to learn ms office in two sessions was difficult, and watching lecturers who know what they themselves are doing didn’t help*” (DBP 21). It suggests the lack of student practice with technology during instruction (in lectures). I infer that this limited experiential learning deprived students of what Davydov (1986) calls *theoretical learning*. Theoretical learning is based on student’s

acquisition of methods of scientific analysis of objects or events in different subject domains. Teachers teach methods of scientific analysis and students then master and internalise these methods *in the course of using them* (italics added) (cited in Karpov & Haywood, 1998, p. 31).

c) Limited time in lectures for question-based critical engagement is echoed in this statement: “...*definitely [we] need more time to learn the formulas required for tasks because there isn’t enough time to ask questions [in lectures]!*” (DBP 44). This student who requested extra Excel lessons saw a dissonance between problem solving in labs and time allocated in lectures for asking questions.

These challenges of striking a balance between huge workloads and entertaining question-based interactions were also acknowledged by one lecturer (see lecturer’s extract in Section LD.22). The limited student-peer engagements<sup>103</sup> (that is, 8a-c) on Facebook highlighted the limitations of lecturer-student interaction in traditional lectures. These challenges augur well with the problems I cited in Chapter 1 (see Section 1.3.1-1.3.3, and 1.3.4.3). The discussion above answers the research question: 1.5.2. *How do peer-based academic support structures using SNS provide insights into the problem of lecturer-student relation?*

#### **8.2.2.3. Differential participation and contingent academic empowerment**

In Chapter 1 (see Section 1.3.5.1), I articulated the limitations of traditional classroom networking that online social networking attempts to redress: (see Section 1.1). Some of the problems of lecturer-student in-class interaction that were exposed by student-peer online interactions are:

1. *Differential levels of student participation*
2. *Racialised relations that limited collaborative engagement*

While all student racial groups participated on Facebook, the quantity and quality of participation on the public spaces differed. In terms of participation rates on Facebook, white

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<sup>103</sup> Although not a prevalent feature of Facebook public spaces, collaborative discussions were noticeable among a few PAS who discussed some academic related issues amongst themselves.



students<sup>104</sup> posted comparatively more posts on the discursive spaces than other races. For example, white students posted twice (48%) the number of posts than blacks posted (24%) on the wall. Differential participation therefore, exposed the gaps in racial participation that lecturer-student interaction in classrooms could mask (because of limited question and questions sessions) or take for granted because of limited one-on-one lecturer-student engagement. In the absence of student developed artefacts/writings in lectures to approximate the levels of understanding of different students, it would be hard to assess understanding or shifts in student mental structures. On the contrary, on Facebook, the student postings could be examined by race, gender<sup>105</sup> and differential participation became more evident. Students who could express themselves well had more theory-driven queries directed at the lecturer than their peers. I inferred that some of these tended to be first English language speakers or other students who attended English speaking schools.

On the contrary, students from PDS who were traditionally second English language speakers, though they participated in all Facebook spaces, could not fare well when compared to the PAS<sup>106</sup>. This augurs well with the findings of previous studies. For instance, categorising blacks learners who move into richer private schools where English is the medium of communication, Macdonald (1999) notes that English as a Second Language (ESL) children seldom have sufficient mother-tongue models to scaffold them into their sought-after medium of instruction, which is, naturally, English, the language of power. In light of these differentials in participation, psychological power was implicitly enacted through these subtle forms of exclusion and marginalisation in the scholarly discourses of the subject. In this section, I have therefore addressed the question: *How do peer-based academic support structures using SNS provide insights into the problem of lecturer-student relation?*

### **8.3. Discussion of Power manifested in discourse**

In this section I address issue 2, namely: How interactional power is manifested, articulated, and contested in discourses. This section addresses this research question: 1.5.3. *In what ways*

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<sup>104</sup> Because students used authentic names (as a department requirement) and posted their profiles (showing their racial affiliation) and photos, it was relatively easy to establish their correct identification.

<sup>105</sup> Determining the levels of participation by race, and gender is possible given the requirement of students to sign up on Facebook using their authentic names. The Facebook personal profile and the pictures can also express personal identities as they are publicly accessible. That said however, profiles and pictures can be manipulated.

<sup>106</sup> Because of the strong relationship between race and advantage/disadvantage, the majority of whites can generally be considered as PAS while the majority of blacks and coloured as PDS.

*do SNS subvert power relations and what are its subsequent effects on lecturer-student and student-peer interaction?*

### 8.3.1. Lecturer-student academic relations

#### 8.3.1.1. *Blurring of hierarchical authority*

One salient feature of Facebook communication for students who engaged with it for academic networking with peers was its capacity to create a broader consultative audience beyond the lecturer (peer-based tutorial groups, and senior students, and students groups internationally) (see two student extracts in Section 7.7.1.3). I interpret that not only did students become their own authors, but also critical readers of content that was network-generated. For these students dependence on the lecturer for authoritative information was potentially reduced. This reduction in dependence on academics' authorial knowledge is embodied in these students' use of peer-generated content and as such, constitutes a disruption of vertical configurations of academic power.

#### 8.3.1.2. *Subversion of power through satirical language – an ascetic practice*

Students occasionally employed irony and sarcastic language to challenge and express their displeasure with administrative practices lecturers imposed on them. For example, students resisted the administrative directive that required students to sign into Facebook and join the department Facebook group. Critical comments like: ***“I really wonder is this what they expect from the elite of African students...”*** (WP 149) point to this uneasiness. This resistance constituted in Foucault's terms (2003), an 'ascetic practice,' in the general sense, that is, as an exercise of the self on the self by which one attempts to develop and transform oneself and to attain to a certain mode of being (Foucault, 2003, p. 26). If the exercise of power is about mental manipulation, then students saw in the compulsion to join Facebook an attempt at such control which needed a mental revolution to undermine or subvert.

Other disruptive comments like ***“Wow, was this really necessary?”*** (WP 130) and ***“Ok I have joined [the department Facebook group] now what? do i get a gold star?”*** paints a 'rebellious' attitude towards an administrative action and the search for psychological freedom (WP 141). This student behaviour has some association with Selwyn's (2007, p. 4) study which reports that Facebook was used by less academically successful students as a space for contesting the asymmetrical power relationships built into the institutional offline positions of students and

formal school system. It therefore afforded these students some ‘back-stage’ opportunities to be disruptive, challenging and resistant ‘unruly agents.’ Although power contestations are noticeable in my study, however, there is no evidence to suggest that those students who protested were academically challenged.

#### **8.3.1.3. Ideological complaints-emergent steps in breaching social distance**

Imperative phrases were meant to ensure for oneself greater scope for action by strategically using language as a means for getting the other act in ways that expanded the former’s intentions. For example, the self interest embodied in a student complaint about lecturers’ accessibility for student consultation serve to extend self interest (see WP 139). The contraction of social distance would foster accessibility to theoretical knowledge and information vital for his academic success. This student’s account is reminiscent of the arguments I raised on academic support as a scarce resource (see Section 1.3.1). Similarly, the directive statement in (IP 128) serves an ideological function (self interest) of realising the student’s intentions through relegating possibilities for alternative actions by the lecturer. In *Philosophical-Political profiles*, Habermas cites Arendt who notes that:

Since the purposively rational agent, who is exclusively interested in the success of his action, has to dispose of the means by which he can coerce a subject capable of decision (whether by threat of sanctions, by persuasion, or by skilful manipulation of alternatives for action), “power means every chance in a social relationship to assert one’s will even against opposition” (Arendt, 1976 as cited in Habermas, 1983, p. 171).

In the case of the student who demanded that his lecturer bring him a picture on her flash drive, the imperative demonstrates that the student use a communicative event as a chance to impose control. By the same token, the lecturer’s reprimand (see IP 129) signifies her conscious action to use a similar opportunity to resist student assertion of his will on her and in the process circumscribed his power.

#### **8.3.2. Contingent possibilities of power**

Foucault (1984) suggests the agentive (*productive*) and restraining (*subjugation*) properties of power and discourses are central to the process of construction, articulation and contestation of interactional power relations between academic actors. This understanding is embodied in the two sections below on possibility and directive modes.

### **8.3.2.1. Directive Modality and lecturer's dispositional power**

The lecturer exploited two sets of modal auxiliaries, what I describe as *directive modes* and *possibility modes*. When a student demanded that the lecturer honour her promise of bringing him a map, the lecturer contested this exercise of control on her actions by reprimanding the student. The use of directive modes '*you must*' learn to write politely otherwise '*you will...*' (see IP 129) define the controlling and authoritative position of the lecturer. Related authorial claims like '*no excuses* will be entertained,' (DBP 76) in affirmation of lecturer's reluctance to extend the task deadline, symbolise the privileged and authoritative position of the lecturer as the legitimate and ultimate source of academic information.

### **8.3.2.2. Productive forms of power**

The use of possibility modes like: *you 'can'* use text books [...] (WP 112) and permissive phrases like "you can" choose [...] '*it's entirely up to you*' (IP 41) by the lecturer in support of student task accomplishment resonates with the wide scope for agency and discretion rendered to students in self directed learning. The sharing of authority between potentially hierarchical power agents signals episodes of democratised lecturer-student academic relations. The facilitative form of power embodied in permissive modes provides room for agency. As Arendt (1976) suggests:

The communicatively engendered power of common convictions goes back to the fact that the parties are oriented towards agreement and not just towards their own respective success. To this end they employ language not in a "perlocutionary" way (i.e., not just to instigate the desired conduct in the other subjects), but in an "illocutionary way (i.e., to establish intersubjective relations free from violence) (Arendt, 1976 as cited in Habermas, 1983, p. 173).

The illocutionary stance in a communicative event above implies that satisfaction of personal motives is not the entire goal of text-mediated interaction but rather realisation of mutual interests like common understanding as well. This need to realise mutual interests thus necessitates cooperation through language modes that invoke possibilities for permissive behaviour.

## **8.3.3. Student-peer relations**

### **8.3.3.1. Collaborative engagement's transformative power**

Consistent with my view that mental transformations are a source of psychological power, students who engaged in transformative discourses (explorative talk type) on academic

matters realised their academic empowerment (see Section 5.3.3.1). The few cases of explorative talk symbolise the gradual shift in students thinking from acquisition mode of learning to deep learning. By making justifiable assertions, and counter propositions, students become co-participants in the ‘scientific’ knowledge development processes. I argue that these reflexive, cogitative processes had potential to unseat both vertical and horizontal power structures in two ways: a). Through inducting students in knowledge construction practices that significantly narrow the knowledge gap between academics and students, b). Catapulted some students to assume supra-level roles similar to those of tutors and hence reconfiguring horizontal power (for example, resource person example).

### **8.3.3.2. The public ‘performativity’ of male identities**

The impressionist attitude of some male students demonstrated that Facebook could be employed as a cultural artefact for the construction and articulation of masculinity. Bosch’s (2008) MXit<sup>107</sup> study of 16-17 year old girls in Western Cape (S.A.) schools on MXit reports the prevalence of what she terms ‘gender performativity.’ This involves the girls’ use of MXit for expression of personal gender and racial identities, either via their use of language or in the sending and receiving of personal photographs. In a similar ways, the quasi public posture of wall posts allowed boys to parade their virtual bodies, their activities and multiple articulations of self (see WP 134). As such, this student was crafting an intellectual and social identity of the boys from this residence he sought to ‘patent’ and perpetuate. Owing to artefacts’ visibility to the ‘watching’ online audience and their retrievability, online personas could be constructing selves and their perpetuating their self-esteem by exhibiting their identities. This section addressed the Research question: *1.5.3. In what ways do SNS subvert power relations and what are its subsequent effects on lecturer-student and student-peer interaction?*

### **8.3.4. Review of analytical framework**

At the intersection of CTT and CHAT is technology-mediated interaction, where text-based interaction is a central aspect. At the theoretical level, their mutual connection is that technology plays a critical role in the mediation of psychological processes. Humans are mentally transformed as they interact with one another through the use of technology, its artefacts (for example, text-based messages) and discourses derived from technology-based

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<sup>107</sup> MXit is a cell phone based instant messaging service (Bosch, 2008:p. 2).

environments. In text mediated interaction, I examined forms of learning (using Mercer's 1996 socio-cultural discourse analysis (SDA)) and power in text-based interaction and discourses (using Fairclough's 1989 CDA). The analytical connection between CTT and CHAT is Mercer's (1996) socio-cultural discourse analysis which I employ to examine forms of learning manifested in discourses in FGDs (see Section 7.7 in Chapter 7) and forms of learning in text based interaction (see Chapter 5).

### 8.3.5 Discussion of learning and power in activity systems and human discourses

In the previous Section, I discussed lecturer-student and student-peer textual interactions on Facebook as 'windows' to grasping how students learned and the relational power struggles that unfolded in these interactions. In this Section, I unravel findings on how structural and contextual factors and Facebook impacted learning and interactional power in technology-mediated environments. I employ an integrated framework that draws on multiple sources of data namely, observations, interviews, post-observation debriefings.

#### 8.3.5.1. Cognitive bridge and 'mass intellectuality'

Students who used Facebook as a cognitive bridge to seek elaboration and clarity from lecturers and peers on complex IS issues and concepts they did not understand in class improved their chances of understanding IS theory and practice. As one IS student noted:

I use Facebook to interact with the online course administrator. *If I do not understand any of the material that was discussed in the lecture then I discuss it with her. [...] the students can also comment if I have a problem like hey let me help you. So that way I get to speak to more people and I get more solutions to a problem* (Interview 8/04/08).

The above citation demonstrates that Facebook was used by high achievers as a heuristic, relational tool, and mnemonic device for augmenting their memory in complex task and theory related task execution. As Pettenati and Cigognini (2007, p. 2) suggests, social [and academic] networking is emerging as a highly natural practice, because it is deeply rooted in our daily behaviour, spontaneous relations, interactions and conversations that support informal learning practices, contributing to the creation and transmission of knowledge. I infer that information seeking, peer-based knowledge sharing, and collective generation of resources are student everyday social practices that are becoming Facebook mediated to

foster ‘mass intellectuality’ (Virno, 1996). Yet this empowering capacity is anchored in type of use (see student Y and Z’s extracts in Table 6.2). The discussion above answers the question: 1.5.4. *In what ways can SN environments be used to scaffold student learning in university?*

#### **8.3.5.2. Learning object and extraneous load**

Constraints of time and huge workloads foreclosed opportunities for elaborating learning objects by lecturers (see LD 3 in Appendix). Yet object’s clarity is fundamental for academic relations as “cognition is seen as embedded in object-oriented activity” (Engestrom, 1995, p. 397). Consistent with my view that power is a psychological concept, when the learning object becomes vague, students’ developmental opportunities are undermined by the ‘extraneous load’ the content imposes on them. As Paas, Renkl and Sweller (2003) suggest, the manner in which information is presented to learners and the learning activities required of learners can also impose a cognitive load. When that load is unnecessary and so interferes with schema acquisition and automation, it is referred to as an *extraneous* or *ineffective cognitive load* (p. 2). I infer from Paas et al. (2003) that the obscurity of learning objects undercut student capacity to assimilate new knowledge, stagnating transformation which is the source of academic empowerment. This answers Research question 1.5.8.

### **8.4. Modelling of mental schemas**

In scaffolding, Vygotsky contends, “the teacher working with the school child on a given task questions, explains, informs, inquires, corrects, and forces the child himself to explain” (Vygotsky, 1934/1987, p. 209). On Facebook, scaffolding was activated through question-based critical inquiry and relational reflexivity-employment of peers’ questions and answers as epistemic ‘lenses’ for self assessment of personal knowledge (see second student citation below Table 6.2). The statement: “*[...] to read questions that other people [students] have send and the responses that they got and getting the information from there*” demonstrates that some more capable students used collectively generated Facebook resources to model their mental schema and to create an epistemic positioning. This addresses the Research question: 1.5.4.

#### **8.4.1. Information transmission portal**

The other form of scaffolding on Facebook involved the lecturer addressing queries, elaborating facts, providing supplementary information and directing student attention to the



critical aspects of the problem at hand by providing background information to the solution. This academic support role is embodied in lecturer's extract (see LA. 1 in the Appendix). These affordances would otherwise be hard to re-create in the rigid, time-dependent classroom interactions. This view complements Lomas and Oblinger's (2006, p. 3) notions that students take advantage of the ability to communicate with one another, connect to the Internet, and access information at all times through laptops and cell phones. That said structural discrepancies in ICT access (limited home access to computers, and logistical constraints of campus computer access in huge undergraduate classes) worked to undermine PDS' academic empowerment. This section addresses the question: *1.5.4. In what ways can SN environments be used to scaffold student learning in university?*

#### **8.4.2. Socio-cultural, historical influences on scaffolding**

Student scaffolding was more effective when it was well coupled with positive structurally derived experiences from student past academic histories. With regards his ICT background upon completion of high school one PAS noted:

*I could pretty much say I everything. I could programme, basically I could do excel, access, PowerPoint, front page, build computers. I think I was highly computer literate* (Interview 16/05/08).

However, the strong ICT background had to be complemented by other factors like an achievement motivation to be more academically productive (see first student extract in Section 6.6.1). This providence coupled with aforementioned historical advantages presented a suitable complex for a successful academic role model. These cognitive resources needed conversion into theoretical knowledge usable in formal learning. As Vosniadou (2007) suggests, in order to understand the advanced scientific concepts of various disciplines, students need to restructure their prior knowledge which is based on everyday experience and lay culture, a restructuring that is known as *conceptual change*. I contend that these cognitive resources needed to be strongly coupled with mediated learning experiences based on scientific knowledge and rigour for them to trigger shifts in mental schemas and development.



### 8.4.3. Different academic orientations trigger unintended ‘differential empowerment’

The different orientations towards Facebook use invariably became a source of ‘differential empowerment’ (Brey, 2008) between learners. This is because those students who saw in Facebook an opportunity to academically network took advantage of this to create academic communities for information sharing, knowledge construction and exchanging learning perspectives thus ‘excluding’ those who did not participate. Therefore, active participation in scholarly discursive practices was critical to sustaining an academic identity in knowledge communities. Students who diversified their learning strategies on Facebook through educator based consultation and peer based research, and reflection on peer’s questions, and international collaboration were most empowered. (see two student extracts in Section 7.7.1.3). Asymmetrical student-peer academic relations-the basis for inequitable learning outcomes emerge in response to the varying sophistication, diversity, nature and intensity of Facebook use by students (see Sections 8.2.2.1 and sections 6.5.1-6.5.5). This addresses the question: *1.5.1. How does social (lecturer-student, student-peer) interaction on SNS (Facebook) illuminate understanding of the academic relations and learning nurtured in formal settings (classrooms)?*

### 8.4.4. Broadcasting technologies and the muting of dissenting voices

Instructional technologies like microphones subtly created asymmetrical power relations between lecturer and students in class (see LD. 4 in the Appendix). This muting of student voices constituted an entrenchment of hierarchy as other potentially critical voices were subtly incapacitated and student immersion into scholarly discourses through lecturer-supported in-class discursive practices was compromised. As Gowe (2002) suggests, power relations are enacted in pedagogy- that is, what students and teachers come to ‘know’ through the formal or informal curriculum constitutes and is constituted by power relations. In infer from Gowe that because the subservient parties (students) are denied the same amplifying technology (microphone, loudspeakers) for conversing back with lecturers, not only are classroom communicative events constitutive of relational control and power, but they silence students’ voices in these discourses as well (see LD.22’s view on the department blog<sup>108</sup> in the Appendix). However, Facebook presented equal opportunities for student access to and

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<sup>108</sup> A blog is a genre of a SNS that contains personal publishable web pages. These pages contain dated personal entries /posts by the website owner(s) who could be an individual or a group. The owner usually documents personal experiences, emotions or issues of personal or public interest, receives latest news updates and is continually updated.

use of the technology-mediated resources and hence it democratising effect. This discussion addresses the Research question: 1.5.1.

#### 8.4.5. Roles

##### 8.4.5.1. Vertical and horizontal Roles

Blin (2005) differentiates between horizontal or vertical *division of labour*. A horizontal division of labour concerns peer collaboration and assumed equality between the participants. The vertical division of labour, reflects the status of participants and highlights the distribution of power between them (Ibid, p. 110). I argue that in-class interaction is more complicated than Blin's typology for two reasons (a) In large undergraduate classes where 'mob psychology' may prevail, students wrestled power with the lecturers, lecturers were forced to bargain and compromise to retain authority, thus blurring vertical power. (b) Variations in student academic histories, psychological adaptation and mental abilities for handling complex academic problems might also activate pyramidal relations between perceivably equal partners (students). The culture of silence seems evident in one PDS' characterisation of his relationship with his educators in class: "*What exists is some sort of a professional relationship, they come to class, they teach, I listen and they go and then it's over*" (Interview 8/05/08). I interpret that this culture of not asking questions create relations of power asymmetries at student-peer levels. That said, some introverts found Facebook as a homely space for self expression of queries (see Section 6.3.6). This differential participation addresses the Research question 1.5.1.

#### 8.4.6. In class Roles

##### 8.4.6.1. Peer demonstrators

Peer demonstration of concepts allowed lecturers and students to negotiate power and create scenarios of shared authority. Students learned through trial and error, exploration of self concepts and learned to articulate their knowledge in class. In-class peer demonstration, as Karpov and Haywood (1998) suggest, draws on reciprocal teaching, which underscores that instruction should be organised as students' co-operative, shared activity under mutual control. Such scaffolding practice if it had been adopted consistently could have given students more control and responsibility for their learning and in effect, levelled the academic relations of lecturers and students.

#### 8.4.7. Student roles on Facebook

In Facebook activity system, students appropriated the following vertical roles during lecturer-student interaction:

1. **Information seekers**- students used Facebook to recruit responses to their questions and complaints from the online administrator and peers. The queries ranged from theory related task related, course administration, and assessment related.

Horizontal roles related to divisions of labour between themselves and their peers:

1. **Information disseminators**-using Facebook, students provided peers with information on events they missed like lectures, questions assigned (see WP. 128), and career opportunities (see WP.126).
2. **Information generators**–Students used collaborative spaces on Facebook (the discussion board and wall) to discuss course-related issues (see the discussion on 5.3.3.2) and theoretical concepts. Although, they were limited to few students, these discussions symbolised student transformation from information consumers to generators.
3. **Information synthesisers**-This involved students synthesising the contributions peers raised during collaborative discussions (see DBP 20). This role was limited given that more often Facebook queries were directed at the lecturer rather than peers.

A vertical role in Facebook at peer-student level involved:

4. **Resource persons**- Some students assumed the role of ‘super tutors’ as they advised their peers during discussion board interactions. Although, these interactions were lateral relations of influence, they subtly imposed vertical relations when knowledgeable students’ social power was encoded by inference to superior status vis-a-vis peers. (See the resource person role embodied in WP 36 in response to WP 37, which was affirmed by the lecturer in WP 35).

These roles become the seedbed for differential academic relations between learners depending on quality of roles for knowledge generation and intensity of their application.

## **8.5. Activity contradictions.**

While it is the central anchors of CHAT for explaining development and change, the concept of contradictions is very problematic. Engestrom (2001, p. 137) characterise contradictions as “historically accumulating structural tensions within and between activity systems.” I use contradictions to analyse tensions between different activity elements as impetuses for changes in pedagogical practices and student learning and not development research for practitioners by practitioners as in their work. For Russell and Schneiderheinze (2005) when an external force or element becomes part of a teacher’s work activity system, contradictions or tensions result between nodes of the activity system. Contradictions may also result between systems such as those tensions that occur between teachers’ work activity goals during their collaborative efforts.

### **8.5.1. Lecturer A’s contradictions**

#### **8.5.1.2. Limited experiential learning**

Lecturer A identified a contradiction between using multimedia technology (*tool-in-use*) for the demonstration of Excel technical processes in class and the absence of student (*subject*) opportunities for practicing with technology for executing tasks during lectures. The unavailability of student mental schemas for the lecturer to assess formatively their understanding compounded the problem. The lag between lecturer demonstration of concepts in class and students practicals in the computer laboratories further complicated relating lectures to lab tasks. The lecturer’s use of forced errors ‘compelled’ the students to identify the mistakes that she made, making them crisper in problem identification and problem solving. Although, this teaching strategy worked well in face-to-face delivery, it was difficult to apply online given the volume of queries the lecturer had to attend and the public nature of the discussions.<sup>109</sup>

Online, this strategy took a different dimension involving the provision of background information for problem solving or providing leading questions, or detailed explanations that activated critical thinking about the problem. Nevertheless, sometimes detailed explanations unintentionally entrenched a cycle of dependence of students on the educator for academic support. This discussion addresses the question: 1.5.3. *In what ways do SNS subvert power*

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<sup>109</sup> If it had been applied, some students could have used the wrong answers without judging their appropriateness.

*relations and what are its subsequent effects on lecturer-student and student-peer interaction?* The contradiction above is a manifestation of the problem of ‘built pedagogy’ (see Section 1.3.3) that stands in the way of quality technology-mediated teaching and collaborative peer-based engagement.

#### **8.5.1.3. Requirement to use Facebook space**

The Department requirement for students to sign on Facebook was perceived by some students as undue influence on their learning behaviour in a perceivably ‘student controlled’ space. The dilemma was between the department rule (*rule*) to maximise involvement and the need to dispel student’s (*subject*) perceptions that they being ‘coerced’ to participate. This requirement can be conceived as an enactment of hierarchical power. As Gowe (2002) suggests, the kind of knowledge produced in pedagogy interacts with the location of the site and the techniques of power employed there. Here ‘pedagogical knowledge’ articulated through Facebook use was tightly coupled with ‘normalisation’ as a technique of power (see normalisation category in Gowe’s (2002) framework in Appendix C). Power was articulated and negotiated between lecturers and students at two levels, namely: 1). Normalisation [a requirement] was a form of administrative attempt to define and direct student actions, 2). Students’ failure to apply Facebook in academically beneficial ways, in some students’ views, became a tool for manipulation.

Yet through non-participation, some students might have inadvertently exercised interactional power by resisting to be ‘watched’ by academics in public online spaces—“surveillance” in Gowe’s (2002, p. 3) terms. The lecturer resolved this contradiction by encouraging students to engage academically on Facebook –a shift from requiring to persuasion. Some students’ resistance to use Facebook and the shift in pedagogy towards persuasion all point to the subversion of power relations and the capacity of Facebook to liberalise hierarchical power. This addresses the research question: *1.5.3. In what ways do SNE subvert power relations and what are its subsequent effects on lecturer-student interaction?*

#### **8.5.1.4. Redundancies**

Students posted mundane queries that created redundancies. These could be interpreted as a contradiction between students’ (*role*) failure to search the Facebook spaces for the previous questions attempted by the lecturer/peer, and the tool in use (tool). Students failed to employ information management skills to extract relevant theoretical knowledge from the previous

online interactions<sup>110</sup> before asking a question (see administrator's extract in Section 6.4.3.3). Students thus failed to use Facebook as information repository where previous artefacts could be re-accessed to augment memory. Students who did not effectively adopt Facebook as a group support system and a personalised information system, failed to appropriate it for the democratisation of their relations with their educators. Facebook entrenched hierarchical lecturer-student relations through increased academic dependence. This answers question: 1.5.3.

#### **8.5.1.5. Challenges of Collective responsibility**

The last contradiction related to the tensions between departmental staff collaboration (*roles*) and supporting students (*subject*). Because the course was taught by several academic staff, the support of all staff was necessary to ensure that the context in which some questions arose was understood by the online administrator before effective academic support was given. However, some staff failed to adequately cooperate with giving this information or failed to respond in reasonable time to fulfil the need-based character of questions posed by students. Insufficient academic support often undermined student meaningful learning.

### **8.5.2. Lecturer B's contradictions**

#### **8.5.2.1. Institutional culture**

The lecturer conceived a misalignment between the institution's culture (*rules*) on addressivity of lecturers (that seemed to negate the use of titles) and the need for lecturers to be respected as credible information sources. He was concerned about the collegial culture nurtured in this university which was often inadvertently abused by unruly students. For example, some students booed lecturers in classes to express displeasure with lecturers' directives. I interpret this booing as a subversion of lecturers' academic authority and by extension, circumscribed their normative power. As Carspecken (1996) notes, in normative power, subordinates consent to higher social position of superordinate because of cultural norms and these norms consented to will be features of culture. On Facebook students also complained about tutors who insufficiently supported them in computer laboratories and the limitations of classroom practices (see Section 7.3.1.3). These complaints can be interpreted as attempts by the students to negotiate unbalanced academic relations in online settings. This addresses Research question 15.3.

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<sup>110</sup> Previous interactions in public spaces (Wall and Discussion board) are easily accessible to group members who have authorised access through browsing. However, the administrator's private Facebook inbox only allowed for private lecturer-student one-on-one interactions inaccessible to other group members.

### 8.5.2.2. Inter-generational tensions

Another contradiction was the generational tension manifested in the lecturer's <sup>111</sup> (*subject*) expectations that students take notes as he lectured and PAS' reluctance to do so (*roles*) during his lectures. I infer that PAS constituted the Internet generation that was grew up with pervasive technology and had limited motivation to take notes. As literature suggests, having been raised in an age of media saturation, and convenient access to digital technologies, Net Geners have distinct ways of thinking, communicating and learning (Prensky, 2006; Oblinger & Oblinger, 2005). With increased access to digital information in multiple formats (audio, digital and text), students had options to podcast lectures, and listen to them at their own spare time thus render note writing less important. I infer that student access to peer-generated content on Facebook (though limited in Facebook public spaces) and possibilities for podcasting of lectures by students<sup>112</sup> could have subverted lecturer-student relations by liberalising access to content across different spaces, beyond classrooms. The two sections discussed above answer the Research question: 1.5.3.

### 8.5.3. Lecturer C

The contradiction lecturer C noted was between his (*subject*) desire to explain Excel concepts in-depth for effective instruction, on the one hand, and the need to accelerate lecturer pace in the face of limited contact time allocated (*rule*), on the other. The limited time for elaboration of concepts became a source of asymmetrical lecturer-student relations as it constrained possibilities for constructive discourse and dialogic interaction that fully grounded students into IS scholarly discourses. As Gutierrez and Larson (2007) contend, school based literacies generally emphasise ahistorical and vertical forms of learning and are oriented towards weak literacies. For students who consulted with peers and academics online, Facebook thus presented an opportunity for broadened academic networking and compensating for the learning losses suffered in face-to-face academic delivery. This section addressed the question: 1.5.4. *In what ways can SN environments be used to scaffold student learning in university?*

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<sup>111</sup> This lecturer had been taught in a disciplinarian culture

<sup>112</sup> The fact that many of the PAS had i-Pods suggest the possibility that some could have used them for audio recording lectures as personal initiatives.

## 8.6. Student identities

In this section, I discuss the student identities that emerged partly from my empirical data, and from my reflections on literature on structural influences on human psychological functioning and social interaction. Portes and Vadeboncoeur's CHAT discusses how socioeconomic status (SES) and culture may inform individual agentic behaviour in other settings:

As a person grows and ventures out to other settings, *the effects of SES-related structures may have priority. The foundations of agency that were forged earlier become enacted and are themselves transformed*. Parental and group variables may become *proximal* variables, whereas social and educational policies and practices may remain *distal* for the person..." (Italics added) (Portes & Vadeboncoeur, 2003, p. 383).

I infer that human agency is an instantiation of the social structural influences on human action experienced in earlier stages of development by the individual. Social structure presents itself in mental trails of learners in situated context as both resources and constraints on their human actions and agency. My view extends these authors' position by arguing for the continuous, recursive interplay of social structure and contextual factors, and cognitive functioning.

### 8.6.1. Cognitively Proximate/ effective

This identity was motivated by the need to use technology mediated learning to academically excel. The achievement motivation sometimes originated from emulating successful family role models. This family influence is embodied in a student remark (see first student extract in Section 6.5.1). I identified them as '*trailblazers*' who took a leading edge in academic networking. These students were strategic informational synthesisers who corroborated information from diverse sources thus transcending instructor derived resources (see the second transcription extract in Section 6.5.1). This application of diverse sources shows they were 'self directed, internally motivated and inquisitive' (Lomas & Oblinger, 2006, p. 5.3). I argue that such students often assumed new vertical roles (for example, super-tutor roles) owing to their liberation from the unbalanced academic relations of classroom spaces.

### 8.6.2. Cognitively emergent/ 'corporeal' identities

This identity was constructed chiefly by extroverts who had numerous social networks on Facebook. These networks, nonetheless, were either sub-optimally or never exploited for academic purposes (see first citation in Section 6.5.2). I interpret that students constructing this identity found in Facebook a space for self expression, articulating relationships and



expressing their emotions. The “...*I am bored, I am dragged*” statement points at this emotional stance.

More importantly, cognitively emergent identities envisaged Facebook as a space for development of ‘scripts’ about self or multiple selves (see second and third PDS student extracts in 6.5.2). These findings complements my view that some students with a sense of psychological powerlessness are appropriating SNS to contest, by proxy, the power exercised by domineering student in-classrooms. Such identity constructions fulfilled corporeal needs and interests. The statement “*I have my six best pictures on Facebook that are very gorgeous...Like I put out my best foot forward*” testifies this quest for self publicity online. This identifies with Koskela (2004) who employs the concept *empowering exhibitionism* to describe the practice of revealing one’s (very) personal life through use of webcams and television shows and mobile phones. She elaborates that by exhibiting their lives, people claim “copyright” to their lives (Koskela, 2004, p. 206 cited in Albrechtslund, 2008). For PDS, I argue, this visibility could boost their affective and emotional disposition and hence could be psychologically empowering.

### 8.6.3. Cognitively distal

They were introverts who maintained a persistent but muted online presence. Although they followed the discussions on the Facebook public spaces closely, they were did not participate on public spaces to show their presence. It seemed, for them, a ‘lone wolf’<sup>113</sup> (Bacon, Stewart & Stewart-Belle, 1998) mentality had become their dominant work culture. Their lack of commitment to public online communication can be attributable to several factors: timidity about discourse in Facebook public spaces where peers would access their postings and judge them as weak students if they ask conceivably ridiculous questions, the culture of silence nurtured in authoritative high school system, and conceptual difficulty of framing a good question. Statements from PDS like: “*There is no one who heard what I have just [privately] asked now. But if it was in class, classmates would say “stop wasting our time”[...]*” point to this timidity behind public online participation.<sup>114</sup> Bartlett-Bragg (2006) notes in relation to individual inhibitors to informal learning using SNS that learners may fear to publicly publish their thoughts, which can relate to previous issues, or the learners’

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<sup>113</sup> Lone wolf describes an academic personality where a learner believes that she/he can academically succeed without the support of a work team.

<sup>114</sup> Students who often feared public participation often resorted to the administrator’ private Facebook inbox to communicate their queries and grievances.

confidence in their writing skills to adequately represent their thoughts. I infer that some second English language learners might have found the use of public spaces more challenging to their expressive capacity before a ‘watching online audience.’<sup>115</sup> The muted presence of these students online could also be attributable to feelings of racial inferiority. As such, one PDS asserted that seating next to a peer of a different race mattered.

#### 8.6.4. The cognitively challenged

The many students who were not clear about the academic value of Facebook or who did not know how to appropriate Facebook in academically meaningful ways assumed this identity. They opened Facebook accounts solely to meet the IS departmental requirement. I characterise them as “*dormant Facebook users*” because their Facebook web pages though fully functional, were never put to use. Many of these students saw the use of Facebook as a waste of time (see second student extract under Section 6.3.3). For second English language learners, language incompetence undermined their ‘epistemological access’ (Morrow, 1994) to learned content.

#### 8.6.5. The acolytes/ disciples

Acolytes had learning styles that were teacher dependent. Their learning approaches were less flexible and they over-relied on the lecture notes and prescribed reading (DBP 21 and DBP 80), and lecturer’s responses to other students’ questions on Facebook. Students with this orientation thrived on lecturer’s support (discipleship). My view is that this identity enacted authoritative discourses. Sullivan, Smith, and Matusov (2009, p. 330) define authoritative discourse as “any discourse which can legitimately (from the participants’ point of view) control and direct the discourse and the participants’ action and ideas without the participants’ questioning this control, direction, actions, and ideas.” To the extent that these acolytes depended on authoritative lecturers for transmission of expert knowledge, they became predisposed to authoritative discourses. This section on the various identities students constructed through their academic and social interaction on Facebook addresses the question: 1.5.6. *What different student identities emerge from their academic (peer-based and lecturer-student) interaction on Facebook?*

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<sup>115</sup> This resonates my arguments in Chapter 1( see section 1.2.2) about the subtle dominance of PDS by their peers who have a fairly sophisticated mastery of English the language of instruction.

## **8.7. Forms of power negotiated and contested**

This section examines the different forms of power that were constructed by academic interaction (lecturer-student, student-peer) on Facebook and how they were negotiated and contested.

### **8.7.1. Dispositional Power**

Lecturer's legitimate authority was demonstrated by requiring all students to open Facebook accounts including joining the department Facebook group. The fact that all first year IS students heeded to this call was crystal clear evidence that 'dispositional power' (Clegg, 1989) of the lecturers was successfully exercised. Yet, students negotiated power through the leverage they had in terms of what they appropriated the technology for. Student agency was articulated through the resistance by other students to use Facebook completely after opening accounts, thus creating accounts that were dormant or for social purposes rather than academia.

### **8.7.2. Causal Power–reciprocal and dialectical effect**

The lecturer/online administrator's 'causal power' (Clegg, 1989) was exercised through her 'normalisation' of students' learning practice manifested by requiring students to terminate private consultation with her via her private Facebook inbox. Instead, she required that further student academic consultations to be redirected from her Facebook inbox to other communication channels that is, public Facebook spaces (see last statement in IP 110 after a detailed explanation). This is symptomatic of the control the lecturer had over the rules and context of engagement. Evidence of compliance to this requirement (of using public spaces) by students was embodied in the balanced representation of queries on all the three spaces.

Concomitantly, students also entrenched their causal power by requiring the lecturer to attend to conceivably mundane questions: *"You know when I ask a stupid question I don't want to see on her [administrator's] face that she is saying "it is a silly question!/[...]. She should just answer that. If it is silly fine, but she should answer it"* (Interview 8/04/08). By creating an 'obligatory passage point' (Clegg, 1989) which the lecturer had to honour, the above student in effect, caused the lecturer to comply with her (student) intentions in a power relationship. Facebook hence subverted the hierarchical power relationship by allowing the student to overcome differential status barriers to recruit a response online, that could otherwise be impossible in face-to-face contact. As Postmes and Spears (2002, p. 1075)

suggests, by using the capacities of the medium strategically, CMC may disguise power differences, cover up group memberships and help portray “false” identities.

### 8.7.3. Compressing social distance blurs pyramidal authority

The student academic use of SNS bridged the social distance between the lecturers and themselves. Some students found their lecturers more easily accessible and approachable online than in face-to-face consultations. As one PDS alluded: “*When I am in a lecture and want to ask something, I have to think twice, is this appropriate? Is this not a silly question? But when I am there [on Facebook] gee! I ask any question [...].*” (Interview 08/04/08). It is deemed that by building such knowledge based relationship, the lecturers became more accessible to assist students and in effect neutralised the skewed lecturer-student social hierarchy activated by lecturers’ superior status. As Mazer, Murphy and Simonds (2007) suggest, because the face-to-face classroom is a controlled communication event requiring lecturer and students to meet at the same time, a teacher’s use of Facebook is an attempt to communicate with students outside of that controlled environment where lecturers can meet students in their territory. In their terrain, high achievers are put at a distinct psychological advantage in the communication as they know how to negotiate their learning needs and views.

### 8.7.4. Facilitative power in horizontal discursive praxis

#### 8.7.4.1. Contingent empowerment and lateral surveillance

The students who appropriated Facebook for academic purposes especially the *cognitively proximate* exploited multiple information sources. In the process they assumed other vertical roles like becoming resource-persons for their peers and becoming accomplished learners. With this it is expected that the knowledge gap between the lecturer and these students gradually dwindled. The fact that some of the advice they gave to peers was often affirmed by the lecturer further worked to register their identity as credible information sources. This approval could be one way such students garnered respect and status from peers.

### 8.7.5. Review of Analytical framework

In this section, I examined learning and power relations in activity systems and human discourses. I employed CHAT (specifically Russell and Schneiderheinze 2005) to examine (a) the forms of learning in class and Facebook’s influence on classroom learning relations, and (b) Gowe (2002) and Carspecken (1996)’s conceptions of power to examine how power was manifested and negotiated in classroom discourses. The analytical connection between

CHAT (guiding theory in the analysis of findings in Chapter 6) and CTP (guiding theory in analysis findings in Chapter 7) is micro-level power theories (Gowe, 2002; Carspecken, 1996) which I employ to examine micro-level negotiation and contestation of power in both chapter. I have already discussed the limitations of CHAT framework for the examination of power and my adoption of micro level theories of power as complements to deal with the shortcomings of CHAT (see Sections 4.5.3.2) in this area.

## **8.8 Discussion of Learning and Power in human actions and discursive practices**

In Chapter 7, I examined lecturer and student's experiences of lecture interactions, student discursive practices in a FGD and students and lecturers' actions and discursive practices in classroom context (observations) to explore how interactional power and learning manifested in human actions and discourses. In this Chapter, I discuss the findings of that section.

In this section I draw upon lecturer and student interview transcripts of their in-class interaction and Facebook influences on this.

### **8.8.1. Information sharing and diagnostic purpose**

Facebook allowed students to interact through question-based consultation with the lecturer, to share examples on IS related issues and problems. It also enhanced informal networking amongst themselves. The lecturer also acknowledged that she sometimes employed concepts and issues discussed on Facebook to frame the lecture (to clarify issues and direct student attention to important parts of the task) as well as informally assess student understanding (see first extract in Table 6.4). This is in addition to the fact that in-class discussion also transcended classroom to the virtual space and hence the two learning spaces were mutually beneficial, and reciprocally reinforcing. I infer that the advice offered by knowledgeable peers and the online administrator's elaboration of concepts on Facebook provided background knowledge for tackling more complex challenges in subsequent classes and lab tasks. This answers the question that: *In what way do academic relations and learning nurtured in formal settings classrooms draw upon interaction in SNS?*<sup>116</sup>

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<sup>116</sup> This is a de-direction of question 1.5.1. This is important given that I am examining face-to-face relations in this section.

### 8.8.2. Informal grievance handling

Because of the explicit lecturer-student power relations in face-to-face academic contact, students were often anxious about complaining about course management issues. However, the computer-mediated nature of Facebook provided a ‘safe haven’ for students to complain to lecturers about unsupportive tutors during lab exercises (see LA 1 in Appendix). As Noveck (2006, p. 1773) notes, CMC protects individuals as “the medium undermines the connection between online pseudonym and offline identity, for we have no assurance who stands behind an online persona or avatar, it may be one person, it may be more.” I interpret that where student identities are protected/hidden, students are empowered to downplay status differences to get their queries attended to-breaching social distance.

### 8.8.3. Regulation of lecture activities

The lecturers who used Facebook for academic consultation reported that student queries attended to in class were often reduced (see LA 5). This allowed the off loading of redundant questions on Facebook and the time saved from not asking mundane questions in class was redeployed to essential aspects of lectures. Facebook allowed students and lecturers to interact in context, share information needs and common problems in ways that augmented classroom practice of information seeking and instruction. This addresses the question: *In what way do academic relations and learning nurtured in formal settings classrooms draw upon interaction in SNS?*

In the following section, I discuss the following question:

1. *What other contextual, meso and macro factors influence lecturer-student and student-peer interactions in face-to-face academic contact?*

The purpose of this section is to show variables that affected lecturer-student and student-peer in-class relations and classroom learning practice in addition to the influence of Facebook. I characterise these factors as micro level, meso level and macro level factors.

### 8.8.4. Micro-level factors

#### 8.8.4.1. Course structure

Foundational courses that were compulsory often recruited more student attention and motivation than optional courses. Some students from other departments taking this IS course often showed limited enthusiasm to attend lectures on this optional course because they knew that they would not progress with it to the next academic level (see Table 7.2). Aspects of

Excel and Access were often done in privileged high schools and therefore this affected lecture attendance at university level for those students who did such courses. Some PAS who had done these courses were often less attentive in class or left the class upon the lecturer's introduction of the lesson. On Facebook, while all students were presented with equal opportunities to ask lecturers questions, a few PAS transcended this and engaged in collaborative discussions amongst themselves. As such, the quality of participation on SNS differed.

#### **8.8.4.2. Huge classes due to massification**

The large classes were often cited by lecturers as standing in the way of meaningful academic engagement (see LA 22 ). Student-peer collaboration which is critical for improved knowledge generation and task-based interaction was stifled. On Facebook, however, opportunities for peer-based and lecturer-directed interaction were nurtured. Students saw in Facebook the opportunity to interact online in ways that transcended the limitations of classrooms (limited one-on-one consultations). Some students also become members of international Facebook groups allowing them to share academic material with global networks and to reduce reliance on educators for information support and problem solving.

#### **8.8.4.3. Pedagogical styles that limit experiential learning**

One of the problems of the transmission pedagogical style in resource constrained environments is the limited opportunities for students to experience the use of technology during instruction. All the lecturers expressed this limitation arguing that lecturer-student interaction was less engaging because students were just seeing lecturers demonstrate Access and Excel using instructional technology but were not having the same opportunity to learn by experimenting with technology (see LD 1 in Appendix).

Some lecturers gave exercises on Excel and Access in labs and they would demonstrate the more complex elements in lectures. The challenge of this strategy was that some students lacked the motivation, and experience to independently exercise assigned tasks rendering instruction less beneficial. That said, Facebook could be conceived as a genre of information system from which students could learn to collaboratively engage and create a group support system independent of the lecturer (see Section 7.7.1.3 and student Z in Table 6.2). As such, it augmented lecturers as a space for student experiential learning using computers.



#### **8.8.4.4. Student qualities**

Lecturers' views on the influence of student calibre on in-class interactions varied. While some lecturers felt that the first year classes were exciting to teach because "came unbiased" (see LE 1), other lecturers contested this position arguing that students held subtle subconscious biases for lecturers (see first citation in Section 7.5.1). Some IS lecturers reported that some first year IS students manifested female gender biases and these prejudices could be attributed to their high schools that had positions of power dominated by white males, and the patriarchal nature of the S.A. society. Some students were also reported by lecturers to have preconceptions about the academic superiority of lecturers from the historically privileged race over lecturers from formerly disadvantaged races (see LC 17 in Appendix A). However, lecturers also claimed that they interacted differently with students, and their interactional patterns were invariably consistent with their mannerisms and their racial identities. Some lecturers reported that there was a certain level of assumed authority in having a certain identity, for instance, being an elderly white male lecturer than a black male lecturer or black female lecturer.

I attribute these subconscious age, racial and gender biases by students to the UCT's history as a historically white dominated university, the high visibility of white staff in positions of influence, their higher publication record vis-a-vis their peers (because of experience), and racial biases subtly inculcated in high school about the superiority of certain races over others. That said, lecturer's age was an equally contested variable with both the younger and older lecturers claiming to have more mutual respect and influence over students because of their age (see LD 19 and LE 13). It seems these differences were based on personal experiences than universal realities. On Facebook, however, the identities of interactants seemed flattened as all the students interacted with the online administrator on the same wavelength irrespective of her gender. The fact that much of the interactions in public spaces were educator-supported points Facebook' capacity to 'filter-out' identity signifiers and democratise communication.

#### **8.8.5. Meso level factors**

##### **8.8.5.1. Publishing policy**

One lecturer warned against the university's strong emphasis on publishing that often unwittingly resulted in an oversight on good teaching (see LE 18). The mistaken assumption that holding a doctoral qualification was the quintessence of good lectureship undercut



meaningful lecturer-student interaction. The unintended effect of this oversight on quality teaching was that some students saw in Facebook the opportunity to by-pass their lecturers as information sources and instead engaged with the extended knowledge community. For example, some become members of Facebook global networks that exchanged information on software development (see second citation in Section 7.7.1.3).

### 8.8.6. Macro-level factors

#### 8.8.6.1. *Apartheid legacy and the school system*

Relations of disadvantage in university classrooms, I infer, can be traced back to schooling systems that reinforce separatism and prejudice. It seems race continued to be a signifier of relations in elite high schools buttressed by perceivably discriminatory school fees policies, exclusive recruitment of staff and ‘selective’ enrolment of learners who tend to fit the mould thus reinforcing racial homogeneity (see LC 13). The high school relations are replicated in university classrooms through seating patterns, interactional patterns and social practices that seem to reinforce the perpetuation of ‘racialised’ student-peer relations and an elite learning culture. Through not a prevalent feature of online interactions, a few laces of racially homogenous clusters of students emerged on Facebook as some students reinforced the opinions of peers of similar race, or contributed to issues raised by peers of similar race (see discussion by white students in DBP 19-22, and by black students see DBP. 14 and 15).

### 8.8.7. Discussion of findings on student experiences

#### 8.8.7.1. *Minimalist definition of social networking*

The majority of students interviewed reported that knowing the person from somewhere (be it college, high school) was the prime foundation for accepting someone as a Facebook friend: ***“I only consider whether I know them. If I know them I will accept but if I don’t I will reject.”*** (Interview 8/04/08). By working with known contacts, students were assured that such friends became sources of psychosocial and information support. This finding resonates with previous studies. For example, Otto et al’s (2005) study on how teenagers use the Internet in Germany reports that one of the rationales for the use of internet chats was the need to access net based social support, namely, the need to keep in contact, and their self concept of advice seeking and advice giving users (ibid). Students’ conservative definition of social networking though logical given concerns about paedophiles and human trafficking via

SNS in S.A., such notions limited many students' capacity to broaden their knowledge networks thus undermining student academic empowerment. This addresses Research question: 1.5.4.

#### **8.8.7.2. Mixed experiences of lectures**

Students had different experiences of lectures. Some remarked regarding their lectures that: 'Some (lectures) were good **but some were very boring. Some kept me interested and some I didn't understand the work.**' The boredom some students (especially high achievers) experienced could be possibly attributed to the limited use of student multiple literacies due to instructivist pedagogies. With the new wave of literacies setting in peddled by the information revolution and student access to social networking sites, students were assuming new roles in these informal settings. Lankshear and Knobel (2006) observe that the advent of Web 2.0 has ushered in new literacies [that] constitute a radical departure from conventional literacies, as they are 'participatory,' 'collaborative' and 'distributive' than conventional literacies. For example, the advent of the semantic Web (read-and-write web) has transformed these net-savvy students from information consumers to become what has been called 'producers' (that is, producers and consumers of content synchronically). The student assumptions of these additional roles and disruption of the sole expert role of the educator address the question: 1.5.3. *In what ways do SNS subvert power relations and what are its subsequent effects on lecturer-student and student-peer interaction?*

On the other hand, some students exhibited gender biases: "***It was boring to seat for 45 mins [minutes] and watch someone of the same gender as me teach***" (14/08/08). This male gender bias from a male student seems to contradict the lecturers' perceptions that students had female gender biases. On Facebook, however, gender biases were not discerned as students approached the two lecturers<sup>117</sup> on Facebook with respect, irrespective of their different gender. This demonstrates the capacity of SNS to democratise academic relations by neutralising gender differences. As Jaffe et al. (1995) suggests, by controlling identifying attributes, CMC users might feel less constrained by gender-based stereotypes and social expectations which dictate communication behaviour. Students also had equality of opportunity to consult with lecturers as constraints of FTF interaction (facial expression,

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<sup>117</sup> The two lecturers were the course convenor who had an online presence and the administrator who answered student queries.

voice of instructor) were contained online. This addresses the question: *1.5.3. In what ways do SNS subvert power relations and what are its subsequent effects on lecturer-student and student-peer interaction?*

#### **8.8.8. Discussion of findings from Focus Group Discussions**

In this section, I develop a pedagogical model that can optimally support students meaningful learning in SNS. Students showed different orientations towards the use of Facebook ranging from social networking to academic networking. The social side of Facebook implies that lecturers could take advantage this embedded social practice to integrate some conversational, personal experience-based applications into their Facebook learning activities. The student desire for conversations is manifested in them forming Facebook tutorial groups for collaborative discussions and reflecting on academic materials learned (see first student citation in Section 7.7.1.3).

Some students also reported a inclination towards international collaboration (see second student extract in Section 7.7.1.3). To take advantage of this, students could be taught collaborative engagement through collaborative spaces like collaboratively managed blogs (Moblogging) and tutors could moderate these discussions. These discussions could be embedded into the course and assessed as part of course work. As Petersen (2008) suggests, user driven innovation and user generated content are two phenomena related to the liberating and democratic, participatory aspects of current internet culture.

##### **8.8.8.1 Academic networking on Facebook**

Academic use of SNS by some students resonates with their attempts to take lifelong learning on their own to compensate for what universities often fail to do, that is, to extend discourses beyond institutional boundaries. Some students used Facebook as a platform for sharing academic information in student-initiated Facebook tutorial groups, and in international groups discussing IS issues on Facebook. Yet, there were some contestations in this the FGD about the extent to which Facebook could be used as a personalised working space, with different views emerging on this subject (see Section 7.7.2.1). This desire for ‘student controlled’ spaces could be given effect by promoting personalised learning spaces that augment individual personal knowledge production while also fostering peer-based collaborative networking.

Pedagogical models that seamlessly integrate online interaction with classroom would be useful for enhancing the academic value of Facebook, given the fact that many students mistakenly saw classroom practice and online interaction as discrete learning spaces. Salmon (2000) (see Section 6.3) is useful to draw on for an effective integration of face-to-face delivery with online learning environments. In light of these findings, Salmon's (2000) model and conscious of PDS' need for cognitive scaffolding, I suggest a learning model that involves inter alia, the following:

- *A focus on authentic tasks in technology rich learning environments-* A discursive framework that combines individual knowledge production (for example, requirement for student review of IS lectures experiences) and collaborative discussion of IS theoretical issues on Facebook would be necessary. That would enhance meaningful learning experiences drawing on theoretical knowledge and their everyday knowledge.
- *Encouraging students to meet in real time for knowledge based academic discussions-* Synchronous Facebook discussions on IS issues and tasks would allow students to exchange perspectives on IS topics in real time (see the challenge of meeting online for discussions in Bernard's extract in Section 7.7.1.3). Consequently, it allows personal knowledge exchange among collaborators to trigger authentic, task-based feedback.
- *Inbuilt assessment strategy for personal as well as peer-based evaluation of knowledge and critical thinking* would be necessary for students to gauge progress as well as a basis for formative assessment. Short quizzes based on topics covered in class/discussed online, with an automatic marking system for self assessment, and academic content development with evaluation criteria for assessment of critical thinking by peers would be useful.
- *Allowing for international cultural collaboration through affiliation to global networks* that engage in real time synchronous class discussions on Facebook would empower students to look beyond their immediate classroom environment for knowledge generation, critical enquiry and engaging debate (see reference to international collaboration in Anita's extract in Section 7.7.1.3).

The exploration of intercultural collaboration presents an opportunity for scholars and students to investigate the complex relationship between structure (that is, context and setting) and agency (situated activity and self) (Basharina, 2007, p. 37). This discussion on a pedagogical model that could support learning especially of the PDS addresses the question: 1.5.5. *What pedagogical model can best support student meaningful learning in SNS?*

### **8.8.9. Discussion of Power relations in the classrooms**

The section below discusses the findings of the observations in the ADP and Mainstream classes. For the large classes female lecturers struggled to keep control and maintain a smooth flow of the lectures because of the subconscious gender biases some students had against them. It seemed their identities were not conceived as carrying the codes of power.

#### **8.8.9.1. Herd Instinct**

For the mainstream classes, students used ‘mob psychology’ to negotiate and contest the authority and control of some lecturers (especially females). Students would use disruptive tactics (make erratic noises, grumble or jeer at some lecturers) to register their displeasure with some instructions the lecturers gave or even technical errors lecturers made during demonstration. For example, when there was a technological glitch (when the microphone malfunctioned making one female lecturer’s voice inaudible), she pleaded with the students to bear with her as she could not project her voice. Instead of cooperating, students grumbled (see empirical example 2 in Appendix C). As lecturers had limited contact time, they were often compelled to contain the situation by becoming conciliatory with students to avoid having a makeup lecture.

One male lecturer expressed the challenge of teaching this huge mainstream class (see LD. 13). Students were reported to lack concentration, sleep in class, and showed disdain at the lecturer and these behaviours were often a demonstration of group influence- that is peer pressure. This shows how students can use disruptive power strategies to contest power with the lecturers. On Facebook, some of these disruptive tactics took a different character involving the use of imperative language to ‘force’ the lecturer to comply with student ‘command’ (see student demand in IP. 128), or an expectation for the lecturer to act according to their expectation (see first student extract after table in table 6.2). Online, academics were more incisive to tackle head-on student challenge to their authority given

text-mediated interaction's capacity to sometimes level academic relations because of the absence of eye contact. This in a way this decisiveness entrenched academic hierarchy if the lecturers become inaccessible for academic support on the one hand. On the other, it could be useful for grievance handling and supporting productive academic relations. I have addressed the question: 1.5.3. *In what ways do SNS subvert power relations and what are its subsequent effects on lecturer-student and student-peer interaction?*

#### **8.8.9.2. Seductive power**

'Seductive power' of the lecturers was articulated when some lecturers employed persuasive language and charm as a way of entrenching control. For example, one female lecturer pleaded with students that she could not project her voice without a microphone, as subtle way of using polite language to mask her authority. Her repetition of a previous task she did (redrawing the table after students grumbled- see Empirical example 2 on conciliatory negotiation of power in Appendix C) did not only constitute a positive affirmation of students' request but a conciliatory approach to her exercise of power-a way of entrenching her authority through permissive control. As Jarrett (2008) suggests, functioning through positive seduction rather than negative coercion, the technique of interactivity thus serves as what Barry (2001) terms as 'permissive control' (Barry, 2001 cited in Jarrett, 2008, p 8).

On Facebook however, seductive power emerged as facilitative power where the lecturer used permissive language to allow students to take action in ways that brought mutual benefits. This possibility of student exercise of discretion in problem solving broadened their assumption of responsibility for learning thus potentially flattened lecturer-student academic relations. This discussion answers the question: 1.5.3. *In what ways do SNS subvert power relations and what are its subsequent effects on lecturer-student and student peer interaction?*

#### **8.8.9.3. Review of Analytical framework on human discourses and mediated discursive practices**

At theoretical level, the discussion in this section was guided by the CTP which shares with CTT the commitment to describe and interpret *discourses* (including technology-mediated ones) and *human actions* with a view to unravel interactional power strategies that give rise to skewed human relations. The analytical connection between the two theories is Mercer's

(1996) Socio-cultural Discourse analysis which I adopted for the analysis of discursive practices in:

1. Text based interaction on Facebook to examine forms of learning manifested and the shifts in student epistemic frames manifested in textual messages (that CTT alone failed to effectively do in Section 5)
2. FGD with a view to unpack 'best practice' pedagogical model that could support student meaningful learning in SNS (what CTP alone also fail to do in this Section ).

As such, at the analytical level, Mercer (1996) addressed the analytical limitations of CTT and CTP, namely the examination of mediated learning and shifts in epistemic frames.

At the theoretical level, CTP examines power in ways that CTT insufficiently does due to the latter's emphasis on technological effects (affordances and constraints) on human functioning. Yet the technological nature of my project necessitates drawing on CTT arguments. CTT also examines technology mediated interaction to unearth the affordances and limitations of technology for human agency and social action in ways CTP fail to do. Therefore, at theoretical levels, issues of power were handled by CTP and those on technological affordances and constraints on human discourses by CTT.

## CHAPTER 9

### Evaluation of Research and Conclusion

#### 9.1. Introduction

In this Chapter, I evaluate the research process adopted, discuss the theoretical and practical contribution of this work as well as provide the implications of this work for future research. I have emphasised that this research adopted a Critical epistemological perspective and a Critical ethnographic case study approach for data collection and analysis. The implications of this study are:

1. The development of new knowledge/ insights on 'best practice' of pedagogical models that draw on lecturer-student and peer-based informal academic and social support networks.
2. A interactional power model in SNS that draws on student and lecturer's online learning and in-class learning experiences, and scaffolds learners, particularly, the previously disadvantaged learners.

The evaluation process structure is as follows: The ontological and epistemological foundations of the Critical research and its application in my work, and the methodological and analytical framework adopted in my research, review of the problem statement and research questions. In this chapter, I also provided the practical and theoretical contribution of this work, its implications for future research, my research recommendations, credibility of the research and the limitations of this research and my conclusion.

#### 9.2. Review of the Research Process

In this review, I am influenced by Kinchloe and McLaren's (1994) Critical epistemological perspective, and Neuman (1994) and Guba and Lincoln's (1994) views on theoretical underpinnings that inform Critical research. Carspecken (1996) cite Kinchloe and McLaren's (1994, p. 139-140) who suggest that Critical theoretical research is guided by the following epistemological and ontological assumptions:

1. *That all thought is fundamentally mediated by power relations which are socially and historically constituted.* I infer that human thought is articulated through discourses,



and human actions in social interactions. As such, I interrogated interactional power relations that manifested in and behind discourses in lecturer and student narratives of teaching and learning in technology-mediated environments, in discursive practices in textual interactions on the three Facebook spaces, and in human actions as they interacted in situated educational contexts (classrooms, computer laboratories). In Facebook textual interaction, I discussed how possibilities for democratisation of academic relations (lecturer-student, student-peer) and empowerment were socially situated and contingent upon the quality and intensity of student use of Facebook.

The possibility for equalisation of lecturer-student power relations emerged through:

- a. Higher achievers assuming vertical roles - 'resource person' or 'super-tutor' roles of advising peers on task-related matters online (See Resource persons role in Section 8.4.7),
- b. The broadening of their consultative base beyond the lecturer- some students developed peer-based academic self-initiatives (for example, they formed tutorial groups on Facebook) (see first student comment on academic use of Facebook in Section 7.7.1.3).
- c. Used Facebook as 'collective Third space' where formal and informal scripts and counter scripts converged creating potential for authentic interaction (Gutierrez, 2008; Gutierrez et al., 1995) and transformative learning. For instance, international collaboration on Facebook academic matters (See Anita' comment on academic use of Facebook in Section 7.7.1.3).
- d. Using Facebook for personal academic empowerment through 'participatory surveillance' (Albrechtsland, 2008), where students used peer-to-peer monitoring (checking peers' profile activities and the answers they got to their academic queries on Facebook public spaces) as strategies of getting information and modelling their ways of thinking accordingly (see second student extract after table 6.2). Paradoxically, Facebook also worked as a 'disciplining technique' or disciplining technology (Foucault, 1991; Jarrett, 2008) for many students who failed to employ it for academic networking. These students instead appropriated Facebook for procrastination thus wasting valuable study time.

- 2 *That facts can never be isolated from the domain of values or removed from some form of ideological inscription.* This could mean that humans' abstraction of reality is deeply embedded in values. In my discussion of power and learning, I was conscious of both objective facts in lecturer and student narratives of how Facebook compressed social distance, as well as the subconscious biases students often had for lecturers that implicated the relational power structures between. There seemed to be more assumed authority in being a male lecturer from a historically privileged race compared to being male or female lecturer from the disadvantaged races (see LE 13).
- 3 *That language is central to the formation of subjectivity (conscious and unconscious awareness).* I interpret subjectivity to mean ideological inclinations and positioning. I explored how lecturers and students employed different genres of language and discursive practices in their construction of social power and individual perspectives in text-based interactions on Facebook. Using Fairclough's (1989) CDA, I examined how broader social issues (for example, patriarchal nature of society, cultural norms like respect for academics) influenced the production and interpretation of text, and how text properties mirrored the social structures.
- 4 *That certain groups in society are privileged over others, and although the reasons for this privilege vary widely, the oppression which characterise contemporary societies is most forcefully reproduced when subordinates accept their social status as natural, necessary or inevitable.* I noted in my findings that some second English language speakers from previously disadvantaged backgrounds were psychologically dominated by PAS with a good command of English both on Facebook (see more developed collaborative discussions among PAS in Section 5.3.3.1 which were not evident among PDS in Facebook public spaces) and in class (see first extract below Table 6.2). This is in addition to the psychological advantages the PAS had with regards prior exposure to computers, relatively advanced ICT literacy, which potentially increased their capacity for psychological adaptation to complex learning situations.

### **9.3. Critical Epistemological perspective**

Having provided how I employed the Critical perspective at epistemological level, it is important to evaluate the application of this perspective in my research process. In the following section, I discuss tenets of Critical research and then locate them within my research study. The Critical paradigm was adapted from Neuman (1994) and Guba and Lincoln (1994) (cited in Fossey, Harvey, McDermott & Davidson, 2002, p. 717). In the following sections, I discuss some of these tenets of Critical research in detail.

#### **9.3.1. Uncovering hidden truths that account for social relations and empower people to change society**

One of the hidden truths is that PDS experienced a sense of social and psychological domination in their interactions with peers from privileged academic backgrounds.<sup>118</sup> Although classrooms tended to create fictitious homogeneity among students—that they were all learners with a mutual interest to acquire knowledge from the lecturers in lectures, students sharply differed in terms of their stock of cognitive resources, linguistic competence for public engagement with academics in class, and abilities for coping with academic complexity. Some PDS' sense of domination is manifested in their limited capacity to ask questions in class even when they were given the opportunity to do so due to either shyness, lack of self confidence in public expression, and fear of asking perceivably ridiculous questions (see first student extract below table 6.2). These limitations deprived such students from accessing pedagogical knowledge through lecturer's answers to their questions.

#### **9.3.2. Creative, adaptive beings with unrealised potential, trapped by social forces that disempower**

Feenberg (1999, 2002) holds that the study of technology requires its contextualisation, which is to study its meaning from the point of view not only of the designers, but also from the users.' I interpret that students are knowledgeable and agentive beings who may be empowered or disempowered by technology depending on their conception and appropriation of it. Students who used Facebook as a disciplining technology by limiting it to a socialising technology (socialising, gossiping) with no academic orientation become 'standing reserves' (Heidegger, 1977) open to technological manipulation. They failed to use the technology in

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<sup>118</sup> Because the passing of an ICT literacy test at university entrance level was the only criterion upon which students could become part of the mainstream class comprising students from advantaged academic backgrounds, some PDSs with average ICT proficiency managed to join this class upon passing this test.

academically productive ways. With regards to effective appropriation of technology by novices, I am influenced by Salmon's (2000) views on online interaction (see Section 6.3). The role of the online moderator at each level is critical to effective online learning. In my study, although students were motivated to engage on Facebook (familiarisation), little was done to extend students from familiarisation with the online environment towards peer-based collaborative engagement on academic matters.

Others students just opened Facebook accounts and never consulted with peers or lecturers (see first extract in Table 6.2) became 'enframed' by technology (Heidegger, 1977). The social structure in technology-mediated learning works to enable as well as constrain. For example, the use of English as a language of discourse in Facebook, the digital divide in S.A. (prior limited student access to and confidence with computers) often limited some PDS' academic participation on Facebook, hence social forces disempowered students (see DSX 11 in Appendix). I infer that the digital divide as a social structure could have constrained effective academic functioning in Facebook resulting in non-use of Facebook (see first student extract in table 6.3). The above shows that technological availability does not always guarantee 'epistemological' accessibility.

### **9.3.3. Unrealistic beliefs that guide human actions, and contain myths that hide unequal control over power and objective conditions/resources**

False beliefs among some students played out in their subconscious biases for lecturers. They affirmed lecturers from historically privileged races as embodiments of knowledge and authority. These untransformed notions by students worked to ensure that these lecturers tended to get more respect, attention and co-operation from students than lecturers from historically disadvantaged races. This meant the learning possibilities offered by some lecturers were sub-optimally used because of student scepticism about these educators' teaching abilities (see LC 17 in Appendix). They thus missed appropriate opportunities that enabled them to become accomplished experts in their discipline.

The other myth is that students were often conceived by academics as homogenous entities/ learners who had mutual needs to acquire knowledge from the instructors/ lecturers and as such held equal status. I contest this position. I have given evidence of some students (especially some more dominant PAS) using their dominance to control the in-class actions of their less active,

introvert peers. This created a self imposed hierarchy among learners. The extrovert, high achievers often directly muted their peers' voices through, their subtle monopoly of discourse (asking rational questions, seeking elaborations on theory related issues on Facebook, silencing peers with questions) with the lecturer.

## 9.4. Theoretical and analytical framework

Consistent with the review of the structural and micro-level factors above, I provide a theoretical and analytical framework that guided my study. My theory of social reality (academic relations and learning) was based on the following three tier theoretical abstraction

Table 9.1: The CTT-CHAT-CTP framework<sup>119</sup>

Study theoretical and analytical framework				
Framework		Level of analysis	Focus of analysis	Theoretical framework
CTT –CHAT-	<b>Critical theories of technology (CTT)</b>	Text	Analysis of the properties of text <i>Examined the properties of Facebook textual interactions</i>	<b>Analysis of text based interaction</b>  Fairclough (1989) Critical discourse analysis ( <i>micro-level analysis of text</i> )  <i>Analysis of student artefacts</i>
	<b>Cultural Historical Activity Theory (CHAT)</b>	Discursive practices	Analysis of the Discursive practices  <i>Discussed the discursive styles and learning embedded in student narratives and experiences of Facebook use</i>	Analysis of discursive practices and activity systems  Mercer's (1996) Socio-cultural discourse analysis  <i>Analysis of Facebook artefacts and Focus Group Discussions</i>  Cultural Historical Activity

<sup>119</sup> Although I have layered the three theories, I have only done that for presentation purposes. In practice, all the three theories had both macro and micro analytical frameworks. For example at text level, though I have highlighted Fairclough (1989) alone under CTT, in practice, Mercer's (1996) analytical framework was also used at the discourse level, which is a higher level than text. Similarly, through, I put Gowe (2002) and Carspecken (1996) at macro level (because they analyse power a macro-level concept, in practice, their analytical frameworks target micro level analysis of power. In practice, a macro-micro analytical framework was adopted (see figure 9.3).

<b>CTP FRAMEWORK</b>			Context, socio-cultural, historical and tool mediated learning activities and discursive practices  Analysed Facebook	Theory (Engestrom, 1987, 2001; Russell and Schneiderheinze, 2005)  <i>Analysis of observations, interviews, debriefings with lecturer</i>
	<b>Critical Theories of Power (CTP)</b>	Structural forces and discourses	Analysis of structural forces' influence on interactional power in class and on Facebook	<b>Analysis of power in human actions and discourses</b>  Carspecken's (1996) critical ethnographic approach to power, and Gowe's (2002) <sup>120</sup> micro level analysis of power  <i>Analysis of the negotiation and contestation of power in classroom observations</i>  Burnard's (1991) thematic content analysis  <i>Analysis of lecturer and student experiences in interview transcripts and debriefings with lecturer</i>

At the theoretical level, I am influenced by three broad theories the Critical Theories of Technology (CTT), Cultural Historical Activity Theory (CHAT) and Critical Theories of Power (CTP). I exploit their areas of strength and complement them in their areas of weakness to bring forth an integrated CTT-CHAT-CTP framework.<sup>121</sup>

<sup>120</sup> Gowe's (2002) analytical framework draws on Foucault (1980) views on power

<sup>121</sup> Although, I have presented the theories in a three tier framework, it is important to note that each of the three theories applies at all the three levels of analysis. For examples, the theories of text- Fairclough's (1989) critical discourse analysis applies at all three levels- the properties of text, the production and interpretation of text and social conditions of production and interpretation. CHAT likewise, focuses on micro level learning activities but also draws on socio-cultural and historical forces that impact on activity processes, that influence production and use of tools, the constitution of rules and the social practices that mediate action of community members. Similarly, although Gowe's (2002) micro level codes of power reflect high level structures of power- (his abstraction from Foucault's (1980) views on power. The bottom line is that I have focused on these theories' main areas of emphases, which could macro, meso-level or micro level.

## **9.5. Review of problem statement**

In Chapter 1, highlighted that while academic/power relations (lecturer-student, and student-peer) in face-to-face contact are quite central to student ‘deep forms of learning’ and student academic progression in their courses, capturing and studying these relations was very complex. This complexity was brought to bear by:

### **9.5.1. Temporality, time and spatially bounded nature of academic relations**

For huge undergraduate classes, academic interactions through questions, elaborations, discussions in class are very limited. Lecturers’ additional administrative responsibilities further constrain context-independent and timeous academic support from lecturers. Given PDS’ academic history and social exclusion, such students were most vulnerable and often felt a sense of loss of control and power.

### **9.5.2. Class sizes, huge workloads and time constraints**

Massification of S.A. higher education has resulted in lecturers handling large classes. PDS who access HE are often put at a disadvantage because of limited academic support, limited time for elaboration of content taught in class. While learning involves meaningful social interaction, it also involves shifts in mental structures in response to learners’ interaction with content, facts and perspectives. Yet academics’ access to transformations of mental schemas (to ensure effective academic support) is complicated by class size, time constraints, and absence of student artefacts for formative assessment during instruction. Students are further disadvantaged by these shortcomings leading inequitable learning outcomes among learners.

### **9.5.3. Environmental constraints**

The configurations of classroom space also undermine quality lecturer-student and peer-based academic relations. The layout of lecture seats in rows and the front centre position of most podiums in university lecture rooms sustain the notion that there is one ‘sage on the stage’ and that learners are flippant agents in the knowledge production process. To further compound this, LMS, which many universities depend on for efficient content transmission, are often self-contained techno-structures that remain insulated from the outside community. This limits student access to knowledge beyond contact institutions.

#### 9.5.4. Complex histories and cultural diversity

The embrace of multiculturalism and diversity at HWUs means that there is a diverse mix of students from different academic backgrounds. These complex identities and prior histories (language mastery, communicative competence, cultural capital) potentially activate relations of dominance as they position students differentially in terms of effective appropriation of learning opportunities universities present to learners. SNS present opportunities for studying FTF academic relations by proxy.

#### 9.5.5. Review of Research Questions

The information below give effect to the research questions I set out to answer:

*1.5.1. How does social (lecturer-student, student-peer) interaction on SNS (Facebook) illuminate understanding of the academic relations and learning nurtured in formal settings (classrooms)?*

With regards learning, peer-based Facebook interaction presented opportunities for students to access their peers' mental schemas and to restructure their modes of reasoning accordingly, something that was otherwise difficult to do in classrooms. As one student suggested, Facebook supported ***“knowing how other people [were] thinking, and questioning [oneself] whether [he was] also thinking in that direction [...]*”** (see second extract after Table 6.2). This suggests that traditional authoritative lectures offered less opportunities for collaborative interaction and access to peer's psyche due to limited time for asking questions and responding to questions.

By accessing and sharing peers' perspectives, academically oriented students broadened their academic consultative network beyond the lecturer, who was often the main information source in classrooms. Facebook interactions exposed the culture of silence in lectures often prevalent among PDS. As one PDS characterised his relationship with his educators in class: *“What exists is some sort of a professional relationship, they come to class, they teach, I listen and they go and it's over”* (see DSX 12 in Appendix A). This social practice of non-participation in class by some PDS potentially triggered asymmetrical relations at both vertical and lateral level as students with a questioning culture took the advantage of every opportunity provided to ask critical questions thus further developing their psychological



functions while ‘marginalising’ the non-participating students with a culture of silence. Student complaints on Facebook and blogs about limited contact time in lectures to learn Excel formulae (DBP 44) and not hearing lecturers because of echoes from microphones (LD 22) made lecturer-student interaction in class less productive. SNS exposed the potentially hierarchical-relations between academics and students caused by constrained student critical engagement with lecturer-generated content in class.

The democratising and constraining facets of Facebook use mirrored both the opportunities and limitations of academic relations of classroom. The department requirement for students to sign onto Facebook and the dominance of educator-based consultation resonates with the hierarchical authority the lecturers often assumed as prime knowledge producers in large authoritative classes. Yet the freedom with which some academically oriented students interacted with knowledge communities beyond the lecturers on Facebook suggests the possibilities of students disrupting the monolithic voice of the lecturer and sharing authority (see Section 7.7.1.3).

#### *1.5.2. How do peer-based academic support structures using SNS provide insights into the problem of lecturer-student relation?*

Although students consulted with the lecturer on literature reviews (which necessarily renders drawing on theories), there was no evidence of students engaging amongst themselves on theoretical matters (on the discussion board or the wall posts). The paucity of theory-based conversations among students suggested the unsophisticated, nascent knowledge development processes of many first year learners given the limited opportunities for collaborative peer-based engagement in lectures and assumption of student responsibility for knowledge production (see Section 8.2.2.6). It also resonates with the dominant position of lecturers who engaged in one-way delivery of lecture content weakening the capacity of most students to be independent knowledge generators. The constraints of time in lectures for question-based consultation exposed this limitation of lectures to support student knowledge production (see DBP 44) and to subvert hierarchical authority of lecturers.

Although theory-based interaction on Facebook was limited, students socially networked on academic related issues. Student discussions on the academic value of quizzes exposed the limitations and opportunities of traditional classroom, namely, teaching methods that

emphasised rote transmission, scarce opportunities for experiential learning, and memorisation of content that undermined student engagement in constructivist knowledge production with the lecturer's support. (see Section 5.3.3.1). Quizzes, however, also unlocked affordances for keeping abreast with content taught and acted a basis for self-evaluation that could indirectly motivate student engagement with lecturers.

For high achievers with a solid academic orientation, Facebook served as a space for their self-access to learning resources because: 1). The information was publicly and readily accessible, 2). It could be re-accessed for future use and, 3). Allowed for collaboration with peers in way that broadened their consultative base beyond the lecturer. All these benefits created possibilities for self-paced learning and reduction in student dependence on the lecturer for academic support as they assumed responsibility for their learning.

While all student racial groups participated on Facebook, the quantity and quality of participation on the public spaces differed. PAS<sup>122</sup> posted more questions to public spaces than their previously disadvantaged counterparts. Differential participation therefore, exposed the gaps in racial participation that lecturer-student interaction in classrooms could mask or take for granted because of limited one-on-one lecturer-student engagement. It also unveiled how differential participation in class worked to limit student cognitive growth and undermine the apprenticeship of PDS into accomplished experts in their academic domains and thus trigger unbalanced academic relations.

### *1.5.3. In what ways do SNS subvert power relations and what are its subsequent effects on lecturer-student and student-peer interaction?*

Lecturer-student and peer-based Facebook interaction's effects on power relations was an amalgam of subversion and entrenchment of hierarchical authority. These interactions fostered complex, context dependent power dynamics and interactional genres. The subversion of hierarchical authority manifested in some students' exploitation of imperative language in their conversations with the lecturer in a bid to galvanise and consolidate interactional power in this perceivably 'student controlled' space (see Section 5.5.2.1). This

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<sup>122</sup> The majority of PASs was white.

disruption of normative authority of the lecturer demonstrates the capacity of CMC (SNS) to neutralise status differences and democratise communication among interactants.

Students also subverted power relations through contesting perceivably unpopular departmental practices like the adoption of weekly quizzes for formative evaluation of student understanding of content taught in lectures. One such contestation was between the lecturer and two students in which one student challenged the academics this way: ***“If you guys say it [quiz] will be on something please stick to it as we don’t have just your subject to do and have lots of other things on our minds ...”*** (see WP 41). The fact that the lecturer promised redress to the practice of setting quizzes that were not reflective of taught content demonstrates the capacity of SNS to equalise relations of power. It reflects the power of CMC to value the logic of the arguments rather than academic status of interactants. On Facebook some students also challenged the administrative requirement of academic use of Facebook (see Section 5.5.2.2), a space they saw as ‘their own.’

On the other hand, the dominance of teacher-directed queries ironically created scope for the lecturer to impose authorial claims and directive discourses that worked to entrench hierarchical control and authority of this academic over students. The lecturer employed modal auxiliaries that enforced her position of influence as a source of dispositional power (see Section 5.5.4.1) and agency. The academic authority of lecturers as the credible source of knowledge often explicit in class was reproduced online.

That said, Facebook also exposed the contradictions that often accompanied interactions between unequal partners in perceivably “student-controlled” spaces. Some lecturers saw the concept of Facebook ‘friendships’ between academics and students as problematic as it distorted academics’ relations of influence. The statement ***‘I am your teacher not your pal’*** (see Section 7.5.4) suggests this uneasiness about the disruptive capacity of SNS interaction. Though as it may, SNS presented opportunities for shared authority as students were encouraged to exercise discretion in their execution of tasks (see DBP 53).

#### *1.5.4. In what ways can SNS be used to scaffold student learning in university?*

Scaffolding students was the prime role for which Facebook was adopted as a pedagogical initiative. Students consulted with the online administrator and peers on a range of issues

from general course administration, to theory and task-related queries. Lecturers scaffolded students through elaboration of complex technical concepts (DBP 38), provision of clarification on certain academic practices, provision of background information for successful task accomplishment and advice on solving complex problems in Excel and Access (see DBP 61). Facebook also created a virtual classroom where unsolved questions and issues in class were handled online and vice versa. Facebook therefore broadened the academic consultation and informational support base beyond the confines of the lecture rooms and allowed for the persistence of knowledge sharing practices in informal 'safe' environments.

For some PDS Facebook was a vehicle through which questions conceivably ridiculous and hence otherwise not asked in class could be expressed (see first student citation after Table 6.2). Communication through Facebook inboxes therefore offered a 'safe' environment for self expression while protecting one's identity. As such, timid, shy students and introverts' were presented with an opportunity to articulate their learning needs in ways that suited their self identities and psychosocial limitations.

#### *1.5.5. What pedagogical models can best support student meaningful learning in SNS?*

Pedagogical models that take full cognisance of students' qualities and learning needs are useful for promoting meaningful learning in SNS. Students demonstrated a preference for personalised learning spaces (see second student extract in Section 7.7.2.1), peer-to-peer networking (see third extract in Section 7.7.2.2) and dialogic interaction in networked spaces (student Z in Table 6.2). Additionally, a knowledge development process that recognises and strives to bridge the student disparities in terms of critical thinking, language competence, technological skills would be useful for eradicating differential empowerment. This could would to create equal opportunities for balanced participation. I have developed a pedagogical model that focuses involves:

1. A discursive framework that combines individual and knowledge production and social networking.
2. Encouraging students to meet in real time for dialogic academic discussions based on content discussed in class. This is important given the challenge of getting learners to meet on Facebook for synchronous discussion (see Section 7.7.1.3).

3. Providing an in-built strategy for supporting critical thinking and peer-based evaluation in Facebook. Critical thinking is critical to supporting the underprepared PDS who have less developed thinking abilities.

4. Providing opportunities for international cultural collaboration to allow for the exchange of diversified views on IS discourses. The international collaboration in real time (synchronous discussions) on Facebook would empower students to look beyond their immediate classroom environment for knowledge generation, critical enquiry and engaging debate (see second student extract in Section 7.7.1.3).

*1.5.6. What different student identities emerge from their academic (peer-based and lecturer-student) interaction on Facebook?*

Different student identities were constructed through their interaction on Facebook and in class. These identities include are:

*1. Cognitively proximate/effective*

They were the pioneers who took the first initiative to interact with peers and the online administrator on Facebook. They usually exploited all the three Facebook spaces and were strategic informational seekers who integrated information from diverse sources. They had a motivation to academically achieve and some had family role models they were trying to emulate.

*2. Cognitively emergent*

They were ‘*hyper communicators*’ (Shelly et al., 2008 ) judging from the manifold of Facebook group networks they were members of, many friends they often communicated with frequently on Facebook. They had a strong social orientation and Facebook was a place for relaxation and management of personal identities (see citations in Section 6.5.2). These persons saw learning in Facebook as more about articulation of self identities and not necessarily academic networking.

*3. Cognitively Distal/divergent*

They maintained a persistent but muted online presence. They were introverts who were on Facebook to access peer and lecturer generated resources (see Section 6.5.3). Many of these personas were PDS who feared consultation in Facebook public spaces for several reasons ranging English language constraints, culture of silence among learners cultivated in some high school system, and fear of being associated with asking ridiculous questions.

4. Cognitively challenged- these identities seemed to be unclear about the academic uses of Facebook. Although they created Facebook accounts to meet the course's requirements, they never posted anything. The constraints of English language also discouraged their participation (see 6.5.4).

#### *5. The Acolytes/ disciples*

They had a highly structured learning approach that was highly lecturer dependent. They were less sophisticated in their knowledge development process and they over-relied on the lecture generated resources for their academic progression and did little research to transcend these. Facebook was employed only to ask questions and recruit answers from the lecturers with no/very minimal interaction at student-peer level.

#### *1.5.7. How are students' epistemic frames shifted by lecturer-student and student-peer interaction in SNS?*

Facebook interactions presented opportunities for shifting student mental schemas during learning with peers and the lecturer but these opportunities had to be exploited by students. Students often acquisition-based mode of learning. The lecturer challenged this notions of learning and reinforced a transformative approach to learning (see WP 44). By bringing a new perspective on learning as the appropriation and systematic application of eclectic knowledge drawn from multiple sources and bringing them into a synthesised whole, the lecturer hopefully shifted the student perspectives on what constitutes learning and this shift presumably transformed their mental schemas.

In their collaborative discussion on the academic value of quizzes, students presented different perspectives on how they felt about them. While most of these comments expressed the limitations of lectures, some suggested that quizzes were a useful tool for self assessment. By mediating student contribution of multiple perspectives on an issue, Facebook transformed student cogitative processes by training them to accommodate diverse views on a

subject. Alternative views became a vehicle for developing world views and epistemological positioning.

#### *1.5.8. What other contextual, meso and macro factors influence lecturer-student and student-peer interactions in face-to-face academic contact?*

In lectures, a web of intricate micro and macro level factors were at play in influencing academic relations. The most dominant micro level factors were the lecturer's identity, student qualities and the design of the course. PDS students expressed dismay at some often domineering students, as they alluded to their coyness in big lectures. Apartheid imposed predispositions manifested in class through perceptions of alienation by some PDS. As one PDS noted in relation to whether seating next to someone of a different race mattered to them in class that: 'Yes, because there is this thing [preconception] that certain races are clever [cleverer] and it makes me feel a bit inferior' (Interview 13/08/08). These feelings of impotence affected PDS' Facebook participation differently with some resorting to non-participation or restricting use to private communication spaces.

#### **9.5.6. Practical Contributions**

The practical contribution that this work makes is developing new knowledge on how student informal academic and social support networks in online environments can be drawn upon in student in-class learning. Through drawing lessons from student learning in peer-based knowledge sharing networks, lecturers are can develop SN pedagogical interventions that identify with student learning needs and deal with authentic challenges based on student experiences.

Inferiority complexes combined with perceptions disadvantage in noisy classes (dominated by some PAS) enticed some PDS to academically network on Facebook to compensate for learning losses suffered in class. Some students especially, PDS found Facebook's computer mediated nature as a 'safe zone' for self articulation (social and academic) and an opportunity to contest interactional power differences between themselves and peers, and lecturers. The fact that some PDS created a racially homogenous Facebook tutorial group for exchanging academic material points to this need to create a space for celebrating difference. As such, I provided new insights/knowledge about student academic and social networks. Student informal academic and social support networks in SNE can be drawn upon in their in-class learning when:

#### **9.5.6.1. Facebook is appropriated as a collective “Third space”**

When Facebook is appropriated as a ‘collective Third Space’ (Gutierrez, 2008) that triggers multi-voiced interaction among students, peers, lecturers and the broader academic community that supports dialogic reasoning and epistemic conflict among students, opportunities for transformative learning are created. I argue that some students harnessed Facebook as an equivalent to what Gutierrez, characterises as a ‘Collective Third space.’

An interactionally constituted space, in which traditional concepts of academic literacy and instruction for students from non dominant communities are contested and replaced with forms of literacy that privilege and are contingent upon students’ socio-historical lives, both proximally and distally (Gutierrez, 2008, p. 148).

I interpret that when Facebook as a ‘virtual learning environment’ is tightly integrated with classroom practice, as learning spaces existing in the same ecological environment, and not as discrete entities, only then, can personal knowledge and individual repertoires of practice intersect and mutually complement one another. I therefore, suggest the mutual integration of self reflection tools (for example, e-portfolios) and collective discursive spaces (moblogs)<sup>123</sup> with Facebook engenders “both mutual attention, harmony, [epistemic] conflict and disruption, [and] ‘short cycles of learning that hold the potential for deeper or transformative forms of learning [...]’” (Gutierrez, Baquedano-Lopez & Tejeda 1999 cited in Gutierrez, 2008, p. 152). When students and peers, students and lecturers meet in real time (asynchronous interaction) for topic based discussions, meaningful learning can be enhanced (see Benard’s remarks cited in Section 7.7.1.3). Collaborative discussions which are academically oriented could support peer-based knowledge generation and leverage lecturer-student academic relations as students are trained to become knowledgeable interactants.

When students are required to reflect on classroom learning tasks and personal experiences in their e-portfolios, and to critically engage on theory and task-related matters (based on a critical thinking criteria) through moblogging<sup>124</sup> as new features in Facebook, opportunities for student self-pacing of learning can be promoted. Self-pacing of learning and gradually

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<sup>123</sup> Moblogs are collectively owned, written and critiqued blogs. These web based spaces can be accessible to an individual who is a member of that group.

<sup>124</sup> These blogs and e-portfolios could be connected through hyper textual links to the Facebook public spaces to allow for convenient navigation or run directly from the Facebook public spaces.



increasing responsibility for learning on students are critical facets of democratising lecturer-student power relations.

The reason for incorporating these new features into Facebook is the evidence of student desire for spaces that would allow for critical reflection on learnt content (with some student reference to the formation of Facebook tutorial groups) and the use of Facebook for the archiving of academic material. The issues of introducing e-portfolios in Facebook emerged from student reasoning that:

*It could be a fantastic idea to open a Facebook account just for the keeping of academic documents there. After all students are opening accounts for keeping photos. You find academic material, upload it, and keep a record and you can come back to it when the need arises. (Interview 11/03/08).*

Given the concerns about the security of information kept on SNS, incorporating e-portfolio feature on Facebook could improve student personalised access to self-generated content while improving the security of the information from outsiders.

#### **9.5.6.2. Facebook is adopted as an information repository and for critical reflection**

When Facebook is appropriated as an information repository where students access lecturer and peer-generated knowledge, Facebook becomes an important space for meaningful learning and transformation. I acknowledged in my problem statement the complexity of persistently re-accessing information and knowledge developed in class because of the difficulty of recreating lectures, temporality of classroom interactions and the limited opportunities for student-to-peer interactions (see Section 1.3.1 and 1.3.2).<sup>125</sup>

When students used Facebook public spaces to access and re-access common questions and answers (collectively-generated resources) addressed by lecturers and student peers, only did Facebook become a knowledge repository, but it also propped critical self reflection. Some students could use this knowledge to re-examine and assess their own modes of thinking as a basis for self transformation and improvement (see second student extract after Table 6.2).

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<sup>125</sup> Although lecture slides and notes could be posted on LMS (Vula), the kind of interactions that obtained in class like explanations and elaborations given verbally by lecturers could not be recreated or re-accessed. Although there was an option for podcasting lectures, the poor audio quality of podcasts because of echoes in big lectures, and or poor sound quality of micro phones made this option less attractive.

The above shows that postings by students could become persistently available in future for further reference, thus augmenting one's memory and for critique and hence become knowledge repositories.

#### ***9.5.6.3. Student widening of academic consultative base in personalised learning environments***

While 'mass intellectuality' (Virno, 1996) and user generation of content are precursors for powerful academic networks, it is the quality of interaction that pushes the learning curve higher. It is students who went beyond dependence on the lecturer for academic support on Facebook who were most academically empowered. For instance, some students augmented their intellectual resources by creating self-contained Facebook tutorial groups and joining international networks on Facebook that discussed academic work (see 7.7.1.3). Facebook could thus augment classroom resources as well as provide a forum for the public articulation of knowledge beyond 'pedagogical knowledge' transmitted by the lecturers. Lecturers could greatly enrich classrooms through inter-cultural exchanges if such international collaborations were tightly coupled in seminar discussions in real time (video-conferencing or virtual conference).

#### ***9.5.6.4. Participatory surveillance and contingent 'democratization' of academic relations***

Internet networking has been blamed for being associated with spying and invasion of privacy that is surveillance. As Albrechtslund (2008) suggests, this conventional understanding of surveillance is associated with hierarchical system of power and the use of metaphors like "Big brother" and "Panopticon" involving the gaze of the watcher that controls the watched. In my work, however students developed innovative, productive forms of surveillance where they used Facebook to 'see through' the social and academic lives of their peers what I coined as 'psychological peeps.' (See Shalom in Section 7.7.2.2). This form of surveillance could be productive to the extent that students could use peers' repertoires of practices and activities for developing their own communicative strategies, task negotiation skills and information management which are critical lifelong learning skills.

### 9.5.7. Conditions necessary for 'best practice' of pedagogy in SNE

The other contribution is to provide insights into the conditions necessary for a 'best practice' of pedagogy in SNS based on the understanding of lecturer-student and peer-based interaction. Such conditions should unlock possibilities for new forms of lateral interactions (peer-based interaction, interactions with senior students, and with extended academic community) that challenge the existing vertical relations that have dominated higher education for years. In view of the findings discussed in the previous chapter, I suggest the following:

- *A focus on authentic tasks in technology rich learning environments-* A discursive framework that combines individual knowledge production and collaborative discussion of Information Systems theoretical and task-related issues in a tightly integrated environment would be necessary. Student reflections on self knowledge and IS lecture experiences through e-portfolios and group collaborations via moblogs could be integrated as new Facebook features to foster meaningful student learning experiences drawing on their personal knowledge and with theoretical knowledge (scripts and counter scripts).
- *The encouragement of students to meet in real time for knowledge based academic discussions-*Synchronous Facebook discussions on IS issues and tasks would allow students and peers (with lecturer/tutor moderation) to exchange views and perspectives in real time and allow personal knowledge exchange among collaborators that triggers authentic, task- based feedback.
- *Self critical model based on continuous improvement-* students could contribute to topic based discussions on Facebook guided by a critical thinking model/criteria. An example of such a model could involve provision of factual evidence to back positions or propositions, locating one's positionality in empirically justifiable theoretical basis, some reasonable and logically persuasive basis for making judgements. These discussion could culminate in the production of written individual drafts that could be informally marked by peers privately on the basis of the critical thinking model for continuous self improvement). The correct drafts could be panelled for public critique in groups on Facebook or in face-to-face sessions.

- *Inbuilt assessment strategy for personal as well as peer-based evaluation of knowledge and critical thinking* would be necessary for students to gauge progress as well as to formatively assess oneself. Short quizzes and impromptu exercises based on topics covered in class/discussed online, with an automatic marking system for self assessment (quizzes) and evaluation criteria of critical thinking (for exercises) for assessment by peers of would be useful. These could be handled on a more secure platform like a LMS than Facebook for privacy and security reasons.
- Allowing for international cultural collaboration through global networks on Facebook that engage in real time synchronous classes would empower students to look beyond their immediate classroom environment for knowledge generation, critical enquiry and engaging debate.

## **9.6. Theoretical contribution: A synthesis**

### **9.6.1. Critical Theory of Technology**

CTT was useful for exposing the dual–reciprocal nature of human-technology relations which was itself the basis for human agency and emancipation from technological domination. CTT was therefore, adopted to examine the affordances and constraints that technology (Facebook) use provided to students (especially PDS). While CTT’s greatest strength is its emphasis on the contextualisation of technology use from the view point of both designers and users to avoid technological domination of the latter by technology, and its emphasis on interpretive flexibility,<sup>126</sup> its “two major limitations are: 1). Lack of a social theory on emancipation, 2). Inadequate conceptualisation of power” (Silva, 2007, p. 172). Sclove (1993) in his review of Feenberg’s (1991) CTT, notes that Feenberg envisions the possibility of broader democratic societal change leading the way gradually toward industrial democracy, which might then finally usher in more humane and ecologically sensitive technological designs. Yet, Sclove (1993) suggests, this detachment of technology reform from social transformations processes that come with it, makes CTT elide the pervasive nature of technology. I infer that interactional power co-evolves with technology use and CTT’s oversight on the social transformation processes may entrench domination. I have already noted student use of Facebook for gossiping and procrastination that wasted valuable study time (see cognitively emergent identities in Section 6.6.3).

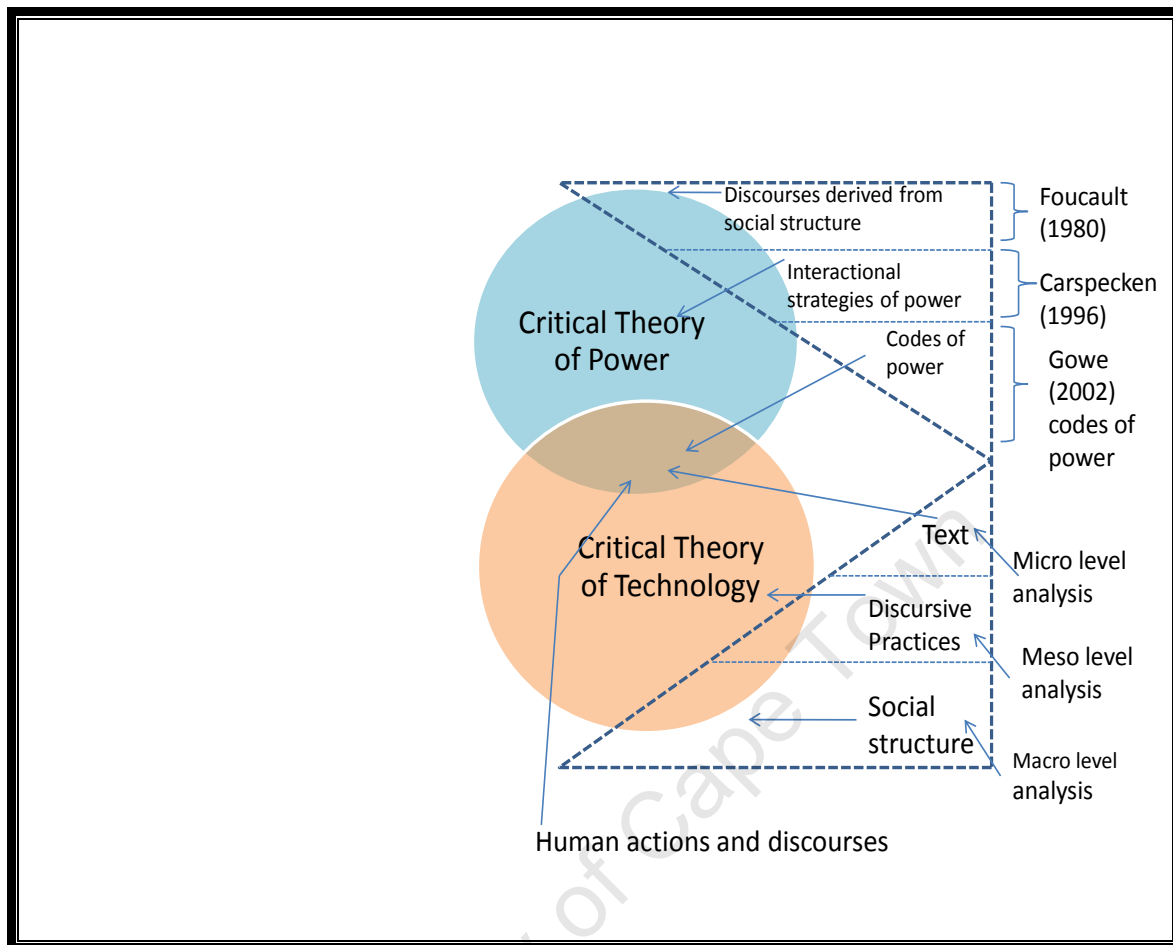
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<sup>126</sup> Interpretive flexibility is premised on the notion that the empowering or disciplinary forms of technology largely depends on the way technology is conceived and appropriated (Feenberg, 1999, 2002; Silva, 2007)

It is this area (of human emancipation) that CTP is best at addressing by adopting ‘reflexive ethnography’ which is a turning back on ourselves (Davis, 1999) in epistemological positionality and ethnographic data collection and analysis. When we turn back, we are accountable for own research paradigms, our own positions of authority, and our own moral responsibility relative to representation and interpretation (Madison, 2004, p. 7). To this end, in my positioning and analysis of research data, I exercised self reflexivity and practised reflexivity on respondents’ perspectives (relational reflexivity). Fairclough’s (1989) CDA (for the examination of text-based interaction), and Gowe’s (2002) and Carspecken (1996)’s conception on micro level application of power- proved essential for this accomplishment. In short, CTP was useful for examining the negotiation and contestation of micro-level power, through reflexive analysis, and complemented CTT in its areas of weakness.

The diagrammatic representation of the theoretical nexus (at micro, meso and macro levels) between CTT and CTP is given (see Figure 9.1). For CTT, three level of analysis exist namely, *social structure* (which constitutes the macro level analysis of the structural dynamics that influence discourses on technological domination and change), *discursive practices* (meso level analysis of the conditions for the production and interpretation of textual messages on technological discourses), and *text* (micro level examination of textual properties on technological debates) (see the lower part of Figure 9.1).

**Figure 9.1: The Critical Theory of Technology-Critical Theory of Power nexus**



Using the CTP lenses, power can also be conceptually and empirically examined at three levels namely *discourses* (macro level analysis of power that is informed by structural dynamics/ social structure), interactional strategies of power (meso level analysis of the power negotiation and contestation scheme) and the codes of power (micro level instantiations of power). At the intersection of the CTP and the CTT are human actions and text based discourses.

### 9.6.2. Critical Theory of Power

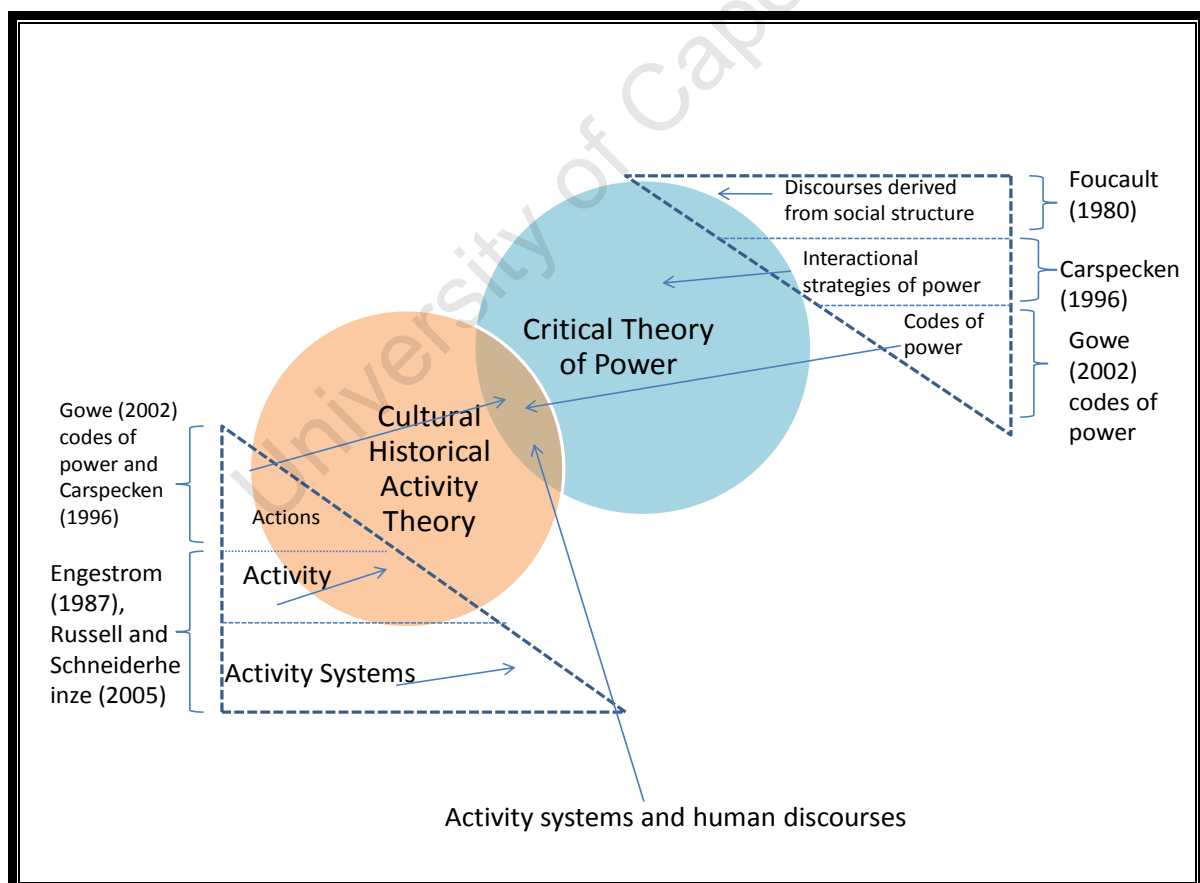
Given CTP's focus on social domination, this approach was useful for my study for exposing the alienation and disadvantage of PDS who enter privileged HWUs. This focus on PDS for the purpose of fostering more opportunities for their empowerment necessitated CTP. While I adopted CTP for examining the operationalisation of power, it was inadequate for tracking mediated learning in technology-mediated environments.

CHAT's focus on structural factors and the role of artefact mediation in appropriation of higher mental functions thus complemented CTP in its limitations (namely, understanding

learning through an examination of manifestations of shifts in mental schemas). This was important for my study given the tool mediated (Facebook, multimedia) and the structural forces' influence on effective student meaningful learning and transformation in Facebook and in classrooms (language mastery, ICT literacy, academic backgrounds and inferiority complexes). I therefore employed Engestrom (1987, 2001) and Russell and Schneiderheinze's (2005) Activity theoretical approach to examine shifts in student epistemic frames as manifestations of cognitive development. I therefore employed CHAT to complement CTP in this area (mediated learning and mental transformation), and CTP to examine the micro-level examination of power, that which also CHAT insufficiently does.

The above theoretical and methodological construction can be conceptualised diagrammatically as shown in Figure 9.2.

**Figure 9. 2: The Critical Theory of Power-Cultural Historical Activity Theory nexus**



As shown in Figure 9.2, CHAT as a methodological and analytical perspective on technology-mediated learning entails three investigative levels namely activity systems,

activity, and actions. Given the limited capacity of CHAT to unravel interactional power, complementary theories of power (Gowe, 2002; and Carspecken, 1996) were drawn upon to strengthen CHAT in its area of weakness. At the intersection of CHAT and the CTP are human actions (a sub unit of activity systems) and human discourses. It is these two concepts that bring to perfect harmony the examination of technology-mediated learning on the one hand, and the negotiation and contestation of power, on the other.

The main contribution of this work therefore is to integrate Critical Theories (CTT and CTP) with CHAT to consolidate their strengths and plug their loopholes. I operationalise the analysis of power strategies by adopting an analytical framework that combines power strategies, technology effects and cultural historical factors all in context. In an epitome, my analytical framework integrates power analytical frames, activity analytical frames and text based interaction.

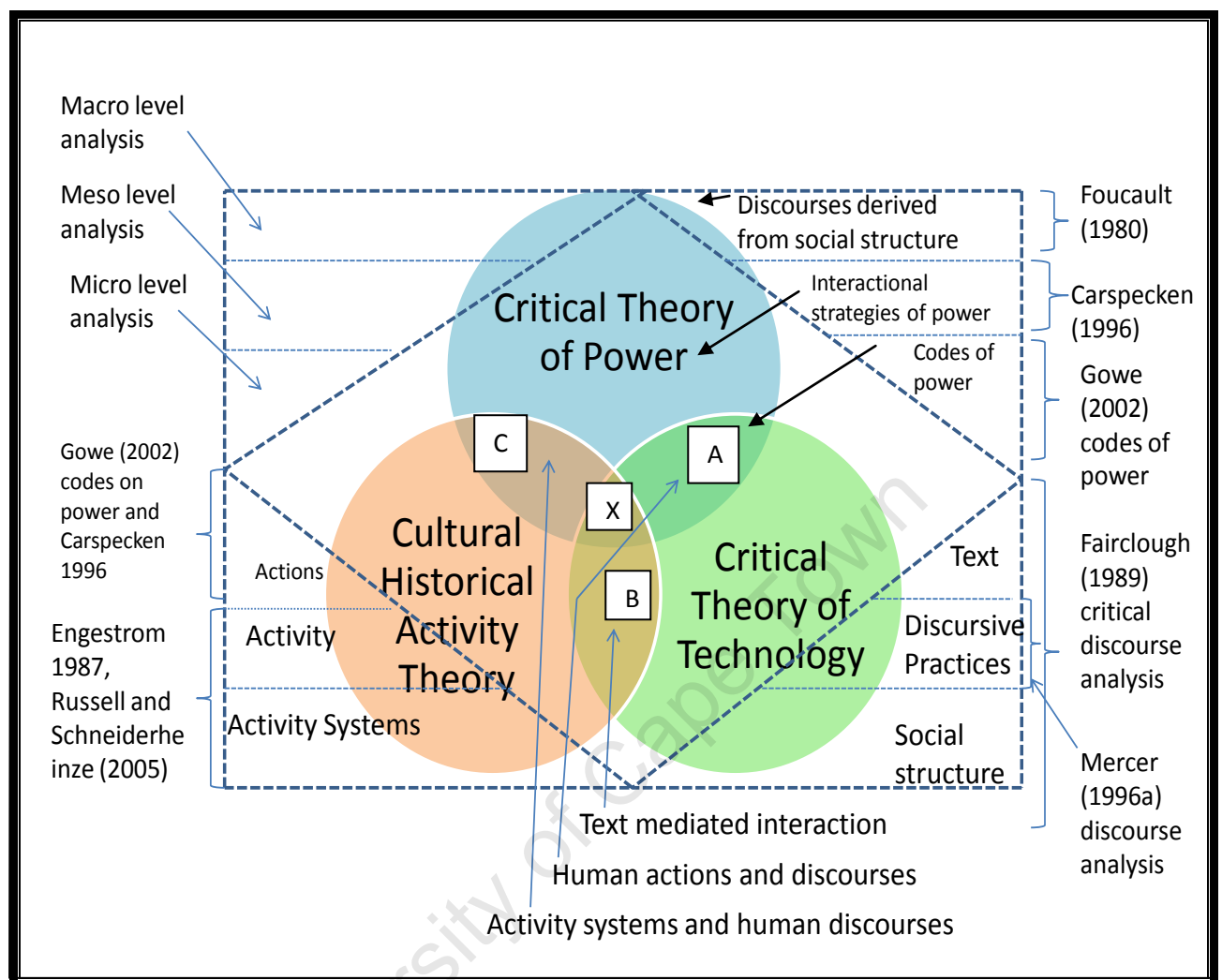
### **9.6.3. A CTP-CTT-CHAT Model on Interactional Power in SNE**

In my examination of power in technology mediated interaction, I employed a modified analytical framework of Gowe's (2002) and Carspecken's (1996) micro-macro level dimensions on power to complement the weakness of CHAT. This is in response to the weakness of CHAT Toomela (2008) cited namely, that CHAT: (1) Focuses analyses on *activities* without taking into account the *individual involved in the activity at the same time*; (2) *Approaches mind fragmentally, without understanding the holistic nature of mind*. Lastly, it is a response to my argument that CHAT fails to adequately handle power negotiations and contestations at node of the activity, apart from the division of labour. I have also articulated the insufficient discussion of power in text mediated discourses under CTT and I have addressed this by using Fairclough's (1989) critical discourse analysis. Finally, I have taken care of the limitations of CTP in addressing the mediating role of cultural and /technological artefacts (Facebook) on psychological transformation using CHAT (in particular, Russell and Schneiderheinze 2005). The diagram below summarises the discussion above.

### **9.6.4. Towards a Theory of Power in Social networking mediated environments**



**Figure 9.3: Three Tier 'Diamond' Model of Interactional Power in SNE<sup>127</sup>**



In Figure 9.3, the arrows demonstrate the physical location of the concepts that are central to the operation of power (academic relations) and technology-mediated learning in three tiers. The circles denote the theoretical lenses that are employed in the investigation of academic relations and technology-mediated learning. Under each of these three interpretive frames/theories lies data analysis tools that also fall into three levels. The actual locations of the three micro level analysis concepts (codes of power, text and actions) are the three intersections (see Figures 9.1 and 9.2 ).

At A (human actions and discourses region) above, that is where the micro level operation of power happens and Gowe's (2002) codes of power are useful for the analysis of power at this level. In the CTP Section (the upper circle excluding its intersections with other circles) is

<sup>127</sup> At the level of interactional strategies of power where Carspecken (1996) is positioned, there is also Mercer's (1996) socio-cultural discourse analysis. The term 'diamond' is derived from the shape that envelops the three theories.

where interactional strategies of power operate and Carspecken's (1996) perspectives on power operate at this level. In the social structure derived discourses (the unshaded region outside the CTP circle), is where Foucault's (1980) views on social power is derived.<sup>128</sup>

At B (where text mediated interaction) occurs, the analysis of text properties is at the centre of analysis. In the CTT area (bottom right circle excluding its intersections), that is where discursive practices operate and Mercer (1996)'s Socio-cultural discourse analysis is a useful analytical framework. The unshaded area behind the CTT circle represents the broader social structure involving the social conditions for the production and interpretation of text. Fairclough's (1989) critical discourse analysis operates at all the three levels-from structure to text.

At C (where activities and human discourses occur), human actions are the focus of analysis and theories of power (Carspecken, 1996; and Gowe, 2002) are the useful analytical tools. Activities alone operate in the bottom left circle (excluding intersections), while activity systems operate in the unshaded area behind the CHAT circle. At these two levels, activity theories (Engestrom, 1987, 2001; Russell and Schneiderheinze, 2005) are useful analytical tools.

#### 9.6.5. Further Research

This research emerged out of the need to emancipate PDS from the limitations of traditional classrooms namely, rigid and temporal learning environment whose interactions and artefacts produced (by students) could not easily be re-accessed for reference to knowledge. The related problem was the PDS' feelings of powerlessness and domination by domineering higher achievers from previously advantaged backgrounds. More importantly, the research emerged from evidence that points at PDS forming informal knowledge sharing clusters on the basis of gender, race and language to overcome the feelings of exclusion in university learning (Ng'ambi, 2004) due to apartheid legacy.

One of the dilemmas that emerged from this research was that although online social networking was hailed for promoting mobile learning (anytime, anywhere access to learning resources) this assumption was often premised on the view that many students had internet

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<sup>128</sup> It is important to note that Foucault's views on power although located in the broader realm of social structure can also be located in the micro as he advocates a 'capillary view on power' where power is articulated in the actions, discourses and practices . As such power applies at all the three levels macro, meso to micro level.

connectivity 24/7. This proved not to be the case as many students especially PDS over relied on campus access to computers and the Internet, and did not have web-enabled phones for accessing peer and lecturer generated artefacts (postings on Facebook) to promote mobile learning. Further research could focus on the use of a Critical ethnographic approach to investigate how use of Facebook run on mobile phones (Facebook mobile) could impact student learning and academic relations.

One interesting phenomenon in this research is that students were more oriented towards private communication with the administrator via her facebook private inbox. Yet the dilemma in Facebook was that the primacy of peer-based networking and the evaluation of students (that is, the 2% mark for signing on Facebook and joining the IS Facebook group) necessitated student use of their authentic names. Consistent with the view that anonymity is often liberating (multiple personas, disguises explicit power differences, reduction of group influence), further research would explore lecturer-student and peer-student relations involving anonymous consultation on Facebook (where students are given an option to use pseudonyms) during interactions.

It seems Facebook remains a social networking service limited to the elites because of the skewedness of access to the Internet in South Africa. For students, access to Facebook is mainly campus based due to high internet tariff rates in cyber cafes. Further studies could examine the extent of representivity of Facebook use among different groups of people (by race, age and profession) in South Africa. Related studies could also interrogate whether current trends in Facebook use are likely to change over time. For instance, currently, it can only be assumed that with increased information literacy and training on the academic use of facebook, effective use of facebook for learning could become heightened. This training in the use of SNS would leverage learning opportunities among all learners (including second language learners and those with limited prior access to ICTs) irrespective of their academic backgrounds.

My study investigated power relations and learning experienced in a specific genre of SNS (Facebook), where identity management and articulation were important hallmarks in the configuration of inter-personal relations on this site. Some interesting findings were that Facebook use democratised student online participation, widened access to learning resources and diluted the monolithic educator-driven production of knowledge. Yet, it is critical to

emphasise that Facebook is just one among a myriad of SNS genres like MySpace, professional online networks (like LinkedIn), instant chatting software (Google chats, Google groups, Mxit), search engines, podcasts, blogs, and wikis. An interesting question for further inquiry is: To what extent can similar impact be found with other SN platforms?

In this work, I raised a fundamental issue of voluntary versus compulsory student presence on Facebook. Educators struggled with whether Facebook use for academic consultation could be made mandatory (a requirement) or be based on individual demand (i.e., need based). The dilemma laid in the argument that while compulsory presence on SNS could potentially scale up the number of students registered on this site, this imposition removed the democratic element that makes SNS participatory platforms. To the contrary, voluntary use without enough training on the academic benefits of SNS could limit the number of students who productively use SNS for educational purposes. Further studies (involving control groups) could help establish the learning impact of compulsion against that of optional academic usage.

Lastly, future studies could also explore further the nature of pedagogical design and the extent of integration of SNE with mainstream models of learning. My study demonstrated that pedagogical design should pay special attention to students' (second English language learners) learning needs, their skills and competencies, allow for mainstream education's integration with other forms of informal learning (like mobile learning), emphasise inter racial collaborative online interaction, the type of content being delivered (whether it allows for splitting and dissemination the content in small manageable parts or demand its provision as a holistic package) and amounts contact time involved. However, these requirements for successful integration could differ from one context to the other, and hence demand further investigation.

## **9.7. Implication of the research**

### **9.7.1. Implications on academic empowerment**

The emergence of new technologies like SNS in higher education signals the increasing importance of personalised learning and social networking. The adoption of SNS by students suggests their quest for liberation from what Pettenati and Cigognini (2007) call the narrow space of learning/learning management systems, namely limited context free learning. I have noted in my problem statement the challenges of traditional authoritative classes: 1). The

limited one-on-one lecturer-student and student-peer interaction in class, 2). The unavailability of traces of these interactions for future reference (temporal nature of interactions), 3). The inaccessibility of student mental schemas during instruction as a proxy for determining their understanding and mental transformation. Facebook textual interaction provided a basis for the addressing these challenges and empowering PDSs suffering from psychological domination by (1) Allowing for persistent lecturer-student and peer-based interaction, across multiple settings, with connectivity, (2) Facebook system could be appropriated as a knowledge repository where past interactions can be re-accessed/retrieved for augmenting personal memory, critical reflection, and collaboration.

I concluded that the students who were most academically empowered were those who adopted Facebook as: (a) An personal information system –or knowledge repository for personally accessing and reassessing data from the multiple Facebook spaces, (b) Who adopted the productive form of peer-to-peer monitoring called participatory surveillance as a basis for improving lifelong learning skills (task negotiation, communication fluency, ‘netiquette’), (c) Who used the space for critical reflexivity of thought by using peer and lecturer generated information as epistemic frames against which to sharpen, adjust, model, or self-critique individual mental structures, (d) Assumed additional vertical roles of advising and becoming resource persons to peers, (e) Viewed the class and Facebook as tightly coupled ecological environments whose practices were mutually dependent and reciprocally enhancing. The implication for education is that learning models that integrate online social networking and classroom learning should draw on student learning experiences of learning across multiple spaces, on student learning needs, and take full cognisance of the differential participation by students across different learning spaces.

### **9.7.2. Implications for academics**

In spite of the increasing importance of personal knowledge in the academic and professional work settings (Lankshear et al., 2000; Gamache, 2002), limited academic research has been done on how personal knowledge developed in informal learning settings can be drawn upon the development of pedagogical initiatives that are more inclusive and responsive to the needs of students especially PDS. This is notwithstanding the fact that some educators are still ambivalent about the use of SNS for learning citing their perceivably disruptive nature with inappropriate use.

More importantly, understanding the nexus between interactional power (lecturer-student, student-peer) and power of academic sources (authors) in student-content interaction would be useful in making academic classrooms more democratic by opening lateral forms of discourse in class rooms, and making students more active, self-regulated agents in the knowledge production process. This could be useful for fostering more critical discourses in lectures based on what Bakhtin (1984) calls ‘internally persuasive discourse.’ Bakhtin (1984, p. 130) notes that a “frank” exchange is governed by internally persuasive discourse (“internal” to the discourse, not to the person’s psyche), that is, outside of any social propriety and convention. I infer that when the monologic voice of academic sources (authors) in student-content interaction is replaced by dialogic discourse based on thoughtfulness of argument, their convincing nature, and substantiation based on empirical evidence, pedagogy becomes a more psychologically engaging and meaningful practice.

### **9.7.3. Recommendations**

#### **9.7.3.1. Collaborative academic networking**

Given the dominance of lecturer-directed academic networking over peer-based networking in public Facebook spaces (see LB 3), nurturing collaborative discussion could have shifted students from information seekers to collaborative generators of knowledge. As Salmon’s (2000) model on online interaction suggests, gradually ceding novices the responsibility for sourcing information from multiple sources and collaborative engagement is critical to student development (the highest stage in her five-point e-learning model. By assuming responsibility for their own learning, taking control of who to academically network within their knowledge community, students would become more independent, self paced knowledge developers.

#### **9.7.3.2. Critical questioning**

In many cases, students experienced problems with asking critical questions on theoretical issues of the course. The paucity of theoretical questions and engagements at student-peer level suggests the limited capacity of some students to engage in critical question based interaction. Lecturers also acknowledged that university pedagogical models revolved around answering questions and rarely on asking good questions (see LC. 26). Extending this view, I recommend that critical questioning at student-peer level be incorporated into pedagogical models of university for the activation of critical engagement beyond the guidance of the

educators. I have already highlighted that critical questioning and dialogic reasoning are critical to the development of higher psychological functioning (Vygotsky, 1978).

#### **9.7.3.3. Mobility on Facebook**

One of the challenges of Facebook interaction was the meeting of students and peers, or lecturer-students in real time to resolve urgent, on demand practical and theoretical problems (see Bernard in Section 7.7.1.3). I infer that learning opportunities on Facebook were lost because of the difficulty of accessing peers and lecturers in real time (synchronous communication). I recommend that use of Facebook mobile run via mobile devices (for example, cell phones) by the lecturer and students would overcome the limitations of having to be on campus laboratories (for students) and in office (for academics) to engage in conversations. The lecturer indicated the constraints of answering students queries when she is out of the office, so reliable internet connectivity and mobility is essential if interaction is to be sustained across campus spaces. To this end, Wi-Fi<sup>129</sup> connections would be useful to promote anytime, anywhere, academic support and student collaborative interaction on Facebook.

#### **9.7.3.4. Redundancies**

In Section 6.5.3.3, I highlighted the problem of student posting on Facebook similar questions repetitively resulting in redundancies. Although, redundancies were partly handled by the lecturer's request for communication in public Facebook spaces (wall and discussion board), a more productive strategy would be adoption on Facebook of a Frequently Asked Question (FAQ tool) to handle mundane questions on course administration. A Glossary of Terms (technical and theoretical) on the department Facebook homepage would also expediently address technical and theoretical concepts. This could create intellectual space for more critical questions and discussion. The involvement of tutors on Facebook to moderate online discussions would offload mundane queries that students often asked.

#### **9.7.3.5. Training of ICT Literacy and English language proficiency**

One of the challenges of the ADP I highlighted is that, although it provided training in ICT literacy for students, it did not necessarily provide instruction in the use of emerging technologies like SNS. As new literacies emerge from the use of SNS (social networking,

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<sup>129</sup> Wi-Fi means wireless fidelity and it is a form of wireless connection that promotes mobile internet connectivity for different applications including mobile phones.

collaborative interaction, development and remixing of self generated content), training students on generic ICT skills becomes insufficient for the acquisition of these skills. The incorporation into the ADP programme of SNS skills enhancement courses would empower students to adequately handle challenges of academic networking. These courses could also incorporate training English language mastery to improve PDSs' communicative skills (which is currently handled by the UCT Writing Centre). Therefore, the collaborative efforts of the Writing Centre and ADP programme would also boost not only the communication skills of students but also academic networking skills.

## **9.8. Credibility of research**

The epistemological stance of this work is Critical and the research design is Critical ethnographic case study. My interpretations of power relations and learning in educational settings are thus consistent with this perspective and assessing the reliability of this work necessitates adoption of the same research approach for the investigator to arrive at the same findings. The extent of generalisability of these findings is thus a function of the similarity of methodological approaches in this study and those of the an alternative researcher, and the similarity of the context of that research with that of my study.

### **9.8.1. Credibility**

Polit and Hungler (1999) observe that credibility deals with the focus of the research and refers to confidence in how well data and processes of analysis address the intended focus. The first question concerning credibility arises when making a decision about the focus of the study, selection of context, participants and approach to gathering data (Ibid). The inclusion of PAS in a study that focused on PDS was important given that the Facebook interaction was designed in such a way that all students could use any/ all of the three Facebook spaces for consultations. Selecting participants with diverse backgrounds increased the possibility of shedding light on the research questions (Patton, 1987; Graneheim & Lundman, 2004).

Graneheim and Lundman (2004) note that credibility of research findings also deals with how well categories and themes cover data, that is, no relevant data have been inadvertently or systematically excluded or irrelevant data included. I therefore, documented verbatim extracts of interview transcriptions and debriefings, particularly those that reflected popular opinions on specific matters, highlighting differences and concurrence of participants' views. I also



inserted trails of my online ethnographic evidence-some textual messages that academics and students posted on Facebook during their academic interactions (see Appendix B).

Credibility can be ensured by availing others with the raw data so that they can analyse it and through member checks in which research subjects are required to corroborate findings (Lincoln & Guba, 1985). Since the research participants' perspective of reality is central to the guarantee of the credibility of research, after my transcription, development of categories from interview data and analysis, 3 IS students and 2 lecturers were requested to blindly review and validate the categories and findings. This was undertaken to cross check whether categories and overall analysis adequately reflected research subjects' perspectives and views on matters investigated. Credibility depends less on sample size than on the richness of the information gathered and on the analytical abilities of the researcher (Patton, 1990). My analysis of multiple sources of data (interviews, online artefacts, FGDs and observation and post-observation debriefings) ensured the credibility of my research through corroboration of evidence.

### **9.8.2. Transferability**

Trochim (2001) reiterates that transferability refers to the degree to which the results of qualitative research can be generalised or transferred to other contexts or settings. The qualitative researcher can enhance transferability by doing a thorough job of describing the research context and the assumptions that were central to the research. In Chapter 1 (see 1.2.1-1.2.4.), and 4 (see 4.8), I provided a detailed reflection of the research context in which this study was conducted. In summary, the study was conducted at an elite HWU, undergoing transformation in terms of student enrolments, particularly increasing PDS' enrolment and throughput. Facebook was adopted as an IS department initiative to ease communication and academic consultation in huge undergraduate classes.

### **9.8.3. Dependability**

Trochim (2001) reiterate that dependability parallels reliability in traditional criteria for judging quantitative research. The general way of approaching the reliability problem is to make as many steps as operational as possible and to conduct research as if someone were always looking over your shoulder (Yin, 1994). The steps of research design, research subject selection, data collection, analysis and validation were elaborately explained so that readers

can establish how findings were developed and arrived at. For example, the analysis of online ethnography was done from three angles:

### **9.9. Limitation of the study**

UCT's definition of PAS was limited to the extent that it emphasised passing of the ICT proficiency entrance test as the main proxy for student enrolment into mainstream class. It should however, be emphasised that in follow-up interviews with one of the lecturers, it was reported that there were some students (mainly blacks) from the mainstream class who also felt academically disadvantaged and underprepared despite having passed the ICT entrance test (the benchmark for being classified as 'academically privileged'). This is one research limitation as such students also experienced a sense of perceived exclusion in spite of them being construed as previously advantaged.

The other limitation of this study is that it did not investigate private student-peer conversations that happened via their private Facebook inboxes. This was because of the complexity accessing this private data from individual students in light of the huge undergraduate classes and impossibility of doing so without compromising their right to privacy.<sup>130</sup> I however inferred the nature of private student-peer conversations from public student-peer Facebook conversations (discussion board and wall) and the private lecturer-student conversations provided by the administrator for downloading and analysis.

The last limitation of this study is that tutor-student interaction on Facebook was not examined because tutors did not interact with students on Facebook. The perceived threats to fairness in marking and professional integrity was the rationale for their ambivalence about being 'friends' with their students. I conceive this as limitation to the extent that learning opportunities that could have been created through these relations online were lost.

#### **9.9.1. Conclusion**

This work examined power relations and learning of academics and students in university settings. The research questioned the capacity of lectures to be vantage points from which to

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<sup>130</sup> This should be contrasted with my access to private lecturer-student Facebook conversations through the administrator's Facebook inbox where approval to access to and use these artefacts was secured from this administrator.

examine interactional power relations given the temporal nature of the classroom interaction, huge undergraduate classes, built pedagogy, lecturer administrative responsibilities that constrained individual lecturer-student, and peer-based interactions. I have proposed SNS (Facebook) interaction as an effective proxy for the examination of academic relations (lecturer-student, student-peer) and student learning.

More so, this research has demonstrated that Facebook worked as a social networking space, academic networking space, identity construction space, power contestation zone and collaborative interactional space. Student informally networked amongst themselves and with their lecturer, created their personalised learning spaces and extended their knowledge communities. They created their online academic identities, and were critical of perceivably unpopular departmental practices. High achievers who assumed resource person roles reconfigured relations of hierarchy at student-peer levels. That said, relations of power also manifested in collaborative practices between academics and students, and student and peers that facilitated realising of collective academic goals.

More so, social interaction in university learning involved technology (text) mediated interaction, human actions and discursive practices and participation in activity systems and human discourses and CTT-CHAT-CTP framework was used to unravel them. My research has demonstrated that SNS' capacity to subvert hierarchical power relations is an amalgam, contingent upon the quality and intensity of SNS use by students, and context dependent. Both academics and students were presented with opportunities for contesting and negotiating power, though the lecturer seemed to exercise, comparatively, more power. That said, SNS (Facebook) also presented academically motivated students with the opportunity to 'broaden' their academic network, reduce dependence on the lecturer for academic support and create some unintended hierarchical relations between these students and their peers as the former assumed 'super-tutor' roles.

Finally this work has raised critical questions that I, in conclusion, want to draw reference and respond to, namely:

### **Will internet access by some exacerbate the digital divide?**

While increasing access to mobile technologies (like mobile phones) in South Africa<sup>131</sup> presents an opportunity for bridging the digital divide through ubiquitous access to networked communication anywhere, anytime, it seems the functionality of these phones is a strong factor in promoting equitable access to the Internet. Access to web-enabled mobile phones remains segmented, with a high concentration among the middle class learners, and working professionals. Internet connection costs in homes are prohibitively high for the working class South Africans, and 3G technology and wireless fidelity (Wi-Fi) for wireless connectivity are not common phenomena for the bulk of the South African population. The stratification of access to ICTs usually according to profession, race (given the apartheid legacy) and age undoubtedly escalates the digital divide.

Students from disadvantaged academic backgrounds have limited off campus access to the Internet. They depend on campus-based access to computers and the Internet, suggesting that the digital divide has different dimensions- i.e., variations in access among groups and not just access or lack of it. More so, the fact that Internet tariff rates in cyber cafes in South Africa remain among the highest in the world, and the huge gaps in terms of internet access (between urban and rural, poor and rich, between different races and within races) in South Africa bear further testimony to the long way South Africa has to go in closing the digital divide.

### **Can democracy be extended to these students but order maintained by anything short of draconian, authoritative teaching practices?**

This is a subtly complex question to provide a precise yes/no answer. The increasing access by students to personalised working spaces like facebook, MySpace, Google chats and search engines implies that networked communication and information generation (among academically motivated learners and peers, and the extended academic community) are increasingly democratised well beyond the traditional knowledge production spaces where lecturers have direct influence and control. The potential for democratisation of access, use and exchange of information for students, is phenomenal. That said, student informal learning networks and informal knowledge production processes though critical to their academic

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<sup>131</sup> South Africa is one of the African countries with the fastest growing rate of adoption of cell phone technology, and it is generally estimated that the number of cell phones owned exceeds the South African population. This presents an opportunity for widened access to the Internet via these mobile gadgets.

survival, often lack quality assurance mechanisms thus making the lecturers' interventions essential. My thesis provides evidence of some students (especially the underprepared) who felt that their lecturers were more legitimate information sources than their peers. They uncritically regurgitated lecture content when writing assignments, and I called these learners 'acolytes'/ disciples. Therefore, if a balance is not struck between informal knowledge production processes by students on the one hand, and responsibility and quality assurance of knowledge by the educators on the other, chances of instructivism degenerating into relentless, authoritative teaching cannot be ruled out.

**Will emerging scholars of a system where “students felt they knew facebook better than the lecturers, so it equalised their relations,” be able to maintain their authority with the rise of new competing technologies that can be predicted to come in future years? How?**

The fact that despite the prevalence of contemporary technologies for recording lectures and reading offline (like podcasts), students still attend lectures by the professoriate is sufficient evidence to suggest that distilled mainstream / bureaucratic knowledge structures transmitted through direct instruction are still and will remain relevant into the future. Increasingly, even telematic and distance learning programs (for example, those offered at the University of South Africa (UNISA)) are also adopting some traits/components of contact-based instruction. All this testifies that lecturers' authority though not guaranteed, will persistently prove important even into the distant future.

That said, lecturers need to develop unorthodox methods of proactive research and develop 'best practices' of pedagogy that adapt and blend representational, social networking and telematic technologies (for example, video conferencing) to scale up their persistent academic relevance in light of competing technologies churned out daily. The teaching and learning benefits accrued from adopting these interventions, if appropriately considered, will by far outweigh the time invested in adopting them and the installation costs incurred.

**Can the South African model for tertiary education provide lessons both for the American and European systems, as well as the other African countries who face different problems now but can be expected to encounter similar problems as the South African ones in the not-too- distant future?**

Too complex a question to precisely answer in light of the myriad of higher education problems faced the world over. Suffice to say, that the South African model of higher education is complex and shaped by historical, political and socio-demographic factors uniquely South African (apartheid legacy, post independent regime driven by equity and justice considerations, merger of South African universities, providing access to higher education to formerly disadvantaged groups, internationalisation of higher education, productive yet accountable, strong academic institutions) through not exclusively foreign/peculiar to those experienced elsewhere. The extent of relevance and application of the South African higher education models to other scenarios in the United States, Europe and other African countries is therefore a function of inter alia, the following:

1. The extent of resemblance and shared history of the South African context and that experienced in other countries.
2. For African countries, South Africa in many respects, often serves as the main benchmark in higher education development given its track record of having relatively stable academic institutions with a tradition of groundbreaking research in various disciplines and scholarly teaching.
3. The issues of addressing past disadvantage and injustices among the historically underprivileged groups through legislation and academic interventions (like Academic Development Programmes, and massification of higher education) have relevance for many African countries and the United States. For example, in post independent Zimbabwe and other African countries, state sanctioned interventions were instituted to reverse the historically derived gross injustices and redress colonially imposed imbalances in the education sector through the appointment of qualified black academics to positions of authority in universities. In the United States, Black Civil Rights Movements and campaigns worked to ensure that underprivileged African-Americans access public higher education (for example, provision of state grants, and affirmative action). Yet the South African example of higher education transformation demonstrates that transformation that targets demographic changes without systemic adjustments – adjustment of the institutional culture, ensuring that technological change incorporates relevance and financial

sustainability, is inadequate for addressing its contemporary higher education challenges.

In summary, the lessons though several, necessitate contextualisation: These are that:

1. There are sharp contradictions between equity in higher education (addressing imbalances in representation of marginalised groups in universities) and efficiency in delivery of teaching and learning goals (that leads to transmission approaches in content delivery). Where this conflict of intention is profound, striving for equity (through massification) could push universities to be innovative and creative to recruit the best students, and this innovation can ultimately enhance the efficiency in resource usage for improved education delivery.
2. Institutional audits, continual capacity utilisation assessments and holistic transformation are critical tools for the promotion of healthy, accountable and collegial life in universities. Transformation processes should also target broadening second language learners' access to knowledge and ICTs through multilingualism (for second English language learners), translation of some academic websites to vernacular, and multi pronged approaches to support underprepared students with learning difficulties. Transformation that is knowledge driven and student oriented is key to excellence in learning, teaching and research.
3. Supporting mobile learning through provision of students (especially the underprivileged students) with mobile learning devices like networked smart phones and blackberries for anywhere, anytime access to learning content and information and to bridge the digital divide is important. Training students in the use of these gadgets could push ICT literacy higher.

## **Biography**

Dr Patient Rambe was born in Masvingo, Zimbabwe and was educated at Marirangwe High School, the University of Zimbabwe (UZ) and the University of Cape Town (UCT) in South Africa. In 2001, he graduated from UZ with a Bachelors of Science (Honours) Degree in Politics and Administration, and proceeded to a Masters in Public Administration at the same university. He successfully accomplished this two and half years programme in 2004. He also holds a Postgraduate Diploma in Project Planning and Management from Christian College for Southern Africa, where he also served as a Project Planning and Management Lecturer from 2004 to 2006. At the University of Zimbabwe, he assumed a Graduate Teaching Assistantship position from 2001 to 2003 before being appointed as a Lecturer in 2004, a capacity he served until mid 2006 when he left for the University of Cape Town (UCT) to pursue a Doctoral qualification. In December 2009, Dr Rambe graduated with a PhD in Education Technology after specialising in the appropriation and application of Social Networking Software for teaching and learning in Higher Education.

Patient also did consultancy work with several national and international organisations inter alia, the following: Intermediate Technology Development Group for Southern Africa (ITDG), Institute of Development Studies (IDS) in collaboration with the Zimbabwe Association of Micro Finance Institutions (ZAMFI), Public Opinion Institute, and Cumulative Research.

His research interests include the innovative use of social networking software for educational purposes, identity management and articulation through the use of web based technologies, technology-supported transformation of higher educational institutions in Africa, and supporting the teaching and learning needs of historically disadvantaged learners through 'web-supported' and 'web-dependent' courses.

Dr Rambe's most recent published works include:

1. The impact of using Social Networking Sites on academic relations and student learning in university settings, Thesis Submitted for the Degree of Doctor of Philosophy to the School of Education, University of Cape Town.



2. The challenges of using weblogs for learning in tertiary settings in Africa, Themed Issue: Science, Technology and Society in Africa, *Postamble* 4 (1), 2008.
3. Barriers to students' use of electronic resources during lectures, *Paper presented at the Southern African Computer Science Lecturers Association (SACLA)*, Kruger National Park, 13-17 July 2008 (Co-authored with Dr Dick Ng'ambi).
4. South African Teens and Facebook, *Presentation made at the Children, Youth, Digital Media colloquium*, Sports Science Institute Conference Centre, Cape Town, 4 April 2008.
5. Vice or Virtue? The Impact on creating Learning Communities through the introduction of Open Source Software at an International University, *Proceedings of the Education Students' 7th Regional Research Conference, Cape Peninsula University of Technology*, 28 September–29 September 2007, p. 66– 79.

## **Awards:**

Dr Rambe is the winner of the Microsoft Best Presentation Award for a co-written paper he presented at the 2008 Southern African Computer Science Lecturers Association (SACLA), Kruger National Park, 13-17 July 2008.

Patient, the 2008 Organising Secretary of the 8<sup>th</sup> Regional Research Conference for Education Students, and his Organising team were congratulated on successfully organising the Conference that was held in the School of Education at the University of Cape Town.

He also scooped the 2006 Best Business Studies Lecturer of the Year Award at Christian College for Southern Africa.

## **Scholarships**

Dr Rambe is a recipient of several generous scholarships awards namely, Spencer Foundation Scholarship, A.W.Mellon Fellowship, University of Cape Town Scholarship and the University of Zimbabwe Graduate Scholarship.

## References

- Adorno, T. (2000). *Introduction to sociology*. (Trans: E. Jephcott). Cambridge: Polity.
- Albrechtslund, A. (2008). Online social networking as participatory surveillance. *First Monday*, 13(3), Retrieved August 16, 2008, from <http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2142/1949>
- Arendt, H. (1998). *The human condition*. (2nd Edition), Chicago: University of Chicago Press.
- Arendt, H. (1976). On the concept of power. In: J. Habermas (1983). *Philosophical-political profiles*. (Trans: F.G. Lawrence). London: Heinemann.
- Ares, N. (2006). Political aims and classroom dynamics: Generative processes in classroom communities. *Radical pedagogy*, 8(2), 12-20.
- Artwell, G. (2007). Web 2.0 and the changing ways we are using computers for learning: what are the implications for pedagogy and curriculum, Pontydysgu: *E-learning Europa Information directory*, Retrieved December 5, 2007, from <http://www.elearningeuropa.info/files/media/media13018.pdf>.
- Atkins, A. (2002). Critical discourse analysis: A letter to expatriates from the Rt. Hon. Sir Norman Fowler MP. Retrieved March 20, 2009, from [http://www.cels.bham.ac.uk/resources/essays/Andrew\\_Atkins\\_Assignment\\_5.pdf](http://www.cels.bham.ac.uk/resources/essays/Andrew_Atkins_Assignment_5.pdf)
- Bacon, D., Stewart, K., & Stewart-Belle, S. (1998). Exploring predictors of student team project performance. *Journal of Marketing Education*, 20(1), 63–71.
- Badat, S. (2008, June 26-26). *The trajectory, dynamics, determinants and nature of institutional change in post-1994 South African higher education: Higher Education Close Up 4*. Paper presented at the Breakwater Conference Centre, University of Cape Town.
- Bakhtin, M.M. (1984a). *Problems of Dostoevsky's poetics* (Trans and Ed: C. Emerson). Minneapolis: University of Minnesota Press.
- Barab, S., Hay, K., & Yamagata-Lynch, L. (2001). Constructing networks of action-relevant episodes: An in situ research methodology. *The Journal of the Learning Sciences*, 10(1&2), 63–112.
- Barry, B. (2001). *Political machines: Governing a technological society*. London: Athlone Press.
- Bartlett-Bragg, A. (2006). Reflections on pedagogy: Reframing practice to foster informal learning with social software. Retrieved February 10, 2009, from <http://matchsz.inf.elte.hu/tt/docs/Anne20Bartlett-Bragg.pdf>
- Basharina, O. (2007). An activity theory perspective on student-reported contradictions in interactional telecollaboration. *Language Learning & Technology*, 11( 2), 82-103.
- Bernstein, B. (1996). *Pedagogy, symbolic control and identity: theory, research, critique*. London: Taylor & Francis.
- Bishop-Russell, J., Dubord, M., Hansen, E., and Webster, K. (2006). Acknowledging a campus.com(munity): [theFacebook] and diversity college. University of Maine. Retrieved March 13, 2009, from [www.studentaffairs.com/vcs/2006entries/UniversityofMaine.ppt](http://www.studentaffairs.com/vcs/2006entries/UniversityofMaine.ppt)

- Blin, F. (2005). *CALL and the development of learner autonomy: An activity theoretical study*. PhD Thesis. Institute of Educational Technology, The Open University.
- Bosch, T. (2009, April 16). *Using online social networking for teaching and learning: Facebook use at the University of Cape Town*. Seminar presented at Hoerikwaggo building, University of Cape Town.
- Bosch, T. (2008, July 7-18 ). *Wots ur ASLR? Adolescent girls' use of cell phones in Cape Town*. Proceedings of the e/merge online conference.
- Boulos, M.N., Maramba, I., & Steve Wheeler, S. (2006). Wikis, blogs and podcasts: A new generation of web-based tools for virtual collaborative clinical practice and education. *BMC Medical Education*, 1-8.
- Bourdieu, P. (1991). *Language and symbolic power*. (Trans: G. Raymond and M. Adamson). Cambridge, Mass.: Harvard University Press.
- Bourdieu, P. (1986). The forms of capital (Trans: R. Nice). In: I. C. Richardson (ed). *Handbook of theory and research for the sociology of education* (241–258). Westport, CT: Greenwood Press.
- Boyd, D. (2007). Social network sites: Public, private, or what? *Knowledge Tree*, 13, May. Retrieved June 13, 2007, from [http://kt.flexiblelearning.net.au/tkt2007/?page\\_id=28](http://kt.flexiblelearning.net.au/tkt2007/?page_id=28).
- Brey, P. (2008). The technological construction of social power. *Social Epistemology* 22(1), 71–95.
- Brown, H. D. (1994). *Principles of Language Learning and Teaching*. Englewood Cliffs, N.J.: Prentice Hall Regents.
- Bruner, J. (1986). *Actual minds, possible worlds*. Cambridge, Mass: Harvard University Press.
- Burch, V., Sikakana, C., Yeld, N., Seggie, J., and Schmidt, H. (2007). Performance of academically-at-risk medical students in a problem-based learning programme. A preliminary report. *Advances in Health Sciences Education*, 12(3), 345-358.
- Burnard, P., (1991). A method of analysing interview transcripts in qualitative research. *Nurse Education Today*, 11, 464–466.
- Cain, J. (2008). Online social networking issues within academia and pharmacy education. *American Journal of Pharmaceutical Education*; 72 (1), 1-7.
- Carspecken, P.F. (1996). *Critical ethnography in educational research: A theoretical and practical guide*. New York: Routledge.
- Centre for Higher Education Development (CHED) (2009). Faculty-based programmes. Retrieved June 15, 2009, from <http://www.ched.uct.ac.za/departments/adp/facultyprogs/>
- Centre for Higher Education Development (CHED) (2009). Interfaculty projects: Overview. Retrieved July 5, 2009, from [http://www.ched.uct.ac.za/departments/adp/interfac\\_proj/overview/](http://www.ched.uct.ac.za/departments/adp/interfac_proj/overview/)
- Centre for Higher Education Development (CHED) (2009). Interfaculty projects: Language Development Group (LDG). Retrieved May 15, 2009, from [http://www.ched.uct.ac.za/departments/adp/interfac\\_proj/ldg/](http://www.ched.uct.ac.za/departments/adp/interfac_proj/ldg/)
- Chaney, B., Muraskin, L.D., Cahalan, M.W., & Goodwin, D. (1998). Helping the progress of disadvantaged students in higher education: The federal student support services program. *Educational Evaluation and Policy Analysis*, 20(3), 197-215.
- Charnigo, L., & Barnett-Ellis, P. (2007). Checking out Facebook.com: The impact of a digital trend on academic libraries. *Information Technology and Libraries*, March 2007.

- Chickering, A. W., & Reisser, L. (1993). *Education and identity*. (2nd Ed). San Francisco: Jossey-Bass.
- Clegg, S. (1989). *Frameworks of power*. London: Sage publications.
- Cohen, L., Manion, L., & Morrison, K. (2000). *Research Methods in Education*. London: Routledge Falmer.
- Coleman, L. (2008). Experiences of African American students in a predominantly white, two-year nursing program. *ABNF Journal*, 19(1), 8-13.
- Cummins, J. (1997). Minority status and schooling in Canada. *Anthropology and Education Quarterly*, 28(3), 411-430.
- Czerniewicz, L. (2004). Cape of storms or Cape of good hope? Educational technology in a changing environment. *British Journal of Educational Technology*, 35(2), 145-158.
- Davis, C.A. (1999). *Reflexive ethnography: A guide to researching selves and others*. London: Routledge.
- Davydov, V.V. (1986). *Problems of development generating learning*. Moscow: Pedagogika.
- Delpit, L. (1988). The silenced dialogue: Power and pedagogy in educating other people's children. *Harvard Educational Review*, 58(3), 280-298.
- Department of Education, (2002). *A New Academic Policy for Programmes and Qualifications in Higher Education*. Retrieved August 3, 2007, from [http://education.pwv.gov.za/DoE\\_Sites/Higher\\_Education/Academic\\_Policy/](http://education.pwv.gov.za/DoE_Sites/Higher_Education/Academic_Policy/)
- DeVries, R. (2000). Vygotsky, Piaget, and education: A reciprocal assimilation of theories and educational practices. *New Ideas in Psychology*, 18, 187-213.
- Dickinson, L. (1995). Autonomy and motivation: A literature review. *System*, 23(2), 165-74.
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. *Journal of Computer Mediated Communication*, 12(4), article 1. Retrieved March 3, 2009, from <http://jcmc.indiana.edu/vol12/issue4/ellison.html>
- Engestrom, Y. (2001). Expansive learning at work: Toward an activity theoretical reconceptualisation. *Journal of Education and Work*, 14(1), 133-156.
- Engestrom, Y., Virkkunen, J., Helle, M., Pihlaja, J., & Poikela, R. (1996). The change laboratory as a tool for transforming work. *Lifelong Learning in Europe* 2, 10-17.
- Engestrom, Y. (1995). Objects, contradictions and collaboration in medical cognition: An activity-theoretical perspective. *Artificial Intelligence in Medicine*, 7(5), 395-412.
- Engestrom, Y. (1987). *Learning by Expanding: An Activity-Theoretical Approach to Developmental Research*. Helsinki: Orienta-Kosultit Oy, Finland.
- Erasmus, Z., & de Wet, J. (2003). *Not Naming 'Race'—Some Medical Students' Experiences and Perceptions of 'Race' and Racism at the Health Sciences Faculty of the University of Cape Town (2003)*, Unpublished paper.
- Fairclough, N.L. (2000). *New Labour, New Language?* London: Routledge.
- Fairclough, N. L. (1995b). *Media Discourse*. London: Edward Arnold.
- Fairclough, N. L. (1995a). *Critical discourse analysis: The critical study of language*. Harlow, UK: Longman.
- Fairclough, N. (1989). *Language and Power*. New York: Longman.
- Feenberg, A. & Barney, D. (2004). *Community in the digital age: Philosophy and Practice*. New York: Rowman and Littlefield Publishers.
- Feenberg, A. (2003). What is Technology. Lecture for the Komaba undergraduates, June 2003. Retrieved March 17, 2007, from

- <http://www.rohan.sdsu.edu/faculty/feenberg/komaba.htm>
- Feenberg, A. (2002). *Transforming technology: A critical theory revisited* (2<sup>nd</sup> Ed). New York: Oxford university Press.
- Feenberg, A. (1999). *Questioning technology*. New York: Routledge.
- Feenberg, A. (1991). *Critical Thinking of Technology*. New York: Oxford University Press.
- Feldman, A. (1999, April 4-9). *Conversational complexity*. Paper presented at the Annual Meeting of the American Educational Research Association. Montreal.
- Feuerstein, R., Klein, P., & Tannenbaum, A. (1991). *Mediated learning experience: Theoretical, psychosocial and learning implications*. London: Freund Publishing House.
- Feuerstein, R., Rand, Y., Hoffman, M., & Miller, R. (1980). *Instrumental enrichment*. Baltimore, MD: University Park Press.
- Flynn, L.J. (2008). MySpace mind-set finally shows up at the office. *New York Times* Retrieved June 15, 2009 from [http://www.nytimes.com/2008/04/09/technology/techspecial/09socialprise.html?\\_r=3&ref=techspecial&oref=slogin](http://www.nytimes.com/2008/04/09/technology/techspecial/09socialprise.html?_r=3&ref=techspecial&oref=slogin)
- Fossey, E., Harvey, C., McDermott, F., & Davidson, L. (2002). Understanding and evaluating qualitative research. *Australian and New Zealand Journal of Psychiatry*, 36(6). 717-732.
- Foucault, M. (2003). *The essential Foucault: Selections from the essential works of Foucault*. In: P. Rabinow and N. Rose (Eds). New York: The New Press.
- Foucault, M. (1991). *Discipline and punish: The birth of the prison*. (Trans: A. Sheridan). London: Penguin.
- Foucault, M. (1984). *The Foucault reader*. In: P. Rabinow (Ed). Middlesex, England: Penguin Books.
- Foucault, M. (1981). *The History of Sexuality: An Introduction*, London: Penguin.
- Foucault, M. (1980). *Power/Knowledge: Selected Interviews and other writings 1972-1977*. New York: Pantheon.
- Foucault, M. (1977a). *Discipline and punish: The birth of the prison*. London: Allen Lane.
- Foucault, M. (1977). What is the author? In D. Bouchard (Ed). *Language, counter-memory, practice*. Cornell, New York: Cornell University Press.
- Foucault, M. (1976). Two lectures. In: M. Foucault. (1980). *Power/Knowledge: Selected Interviews and Other Writings 1972-1977*. Colin Gordon (ed). New York: Pantheon.
- Foucault, M. (1972). *The archaeology of knowledge and the discourse on language*. (Trans: A.M. Sheridan Smith). New York: Harper & Row.
- Fuller, A., Unwin, L., Felstead, A., Jewson, N & Kakavelakis, K. (2007). Creating and using knowledge: An analysis of the differentiated nature of workplace learning environments. *British Educational Research Journal*, 33(5), 743–759.
- Fuller, A., and Unwin, L. (2004). Expansive learning environments. In: H. Rainbird, A. Fuller & A. Munro. (Eds). *Workplace learning in context*. London: Routledge.
- Gamache, P. (2002). University students as creators of personal knowledge: An alternative epistemological view. *Teaching in Higher Education*, 7(3), 277-294.
- Gergen, K. (1991). *The saturated self. Dilemmas of identity in contemporary life*. USA: HarperCollins Publishers.
- Giddens, A. (1984). *The Constitution of Society*. Cambridge, UK: Polity Press.
- Gowe, J. (2002, December 2-5). *Some certainties in the uncertain world of classroom practice: A outline of a theory of power relations in pedagogy*. Paper prepared for

- presentation at the Annual Meeting of the Australian Association for Research in Education, Brisbane.
- Gowe, J. (1995). On the continuity of power relations in pedagogy. *International Studies in Sociology of Education*, 5(2), 165-188.
- Graneheim, U.H., & Lundman, B. (2004). Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today* 24, 105–112.
- Guba, E.G., & Lincoln Y. S. (1994). Competing paradigms in qualitative research. In: N.K.Denzin & Y.S. Lincoln (eds). *Handbook of qualitative research* (105-117). Thousand Oaks, CA. Sage.
- Gutierrez, K. (2008). Developing a socio-critical literacy in the Third Space. *Reading Research Quarterly*, 43(2), 148-164.
- Gutierrez, K., & Larson, J. (2007). Discussing expanded spaces for learning. Profiles and Perspectives. *Language Arts*, 85, 69-77.
- Gutierrez, K., Baquedano-Lopez, P., & Tejeda, C. (1999). Rethinking diversity: Hybridity and hybrid language practices in the third space. *Mind, Culture and Activity*, 6, 283-303.
- Gutierrez, K. (1995, June). *Script, counter script and underlife in the urban classroom: Constructing a Third Space. Paper presented at the Fourth International Literacy and Education Research Network Conference on learning*, June, Townsville, QLD, Australia.
- Habermas, J. (1984). *The Theory of Communicative Action Vol 1: Reason and the Rationalisation of Society*. (Trans: T. McCarthy). London: Heinemann Educational Books.
- Habermas, J. (1983). *Philosophical-political profiles*. (Trans: F.G. Lawrence). London: Heinemann.
- Habermas, J. (1972). *Knowledge and human interests*. London: Heinemann.
- Hall, R. H. (1999). *Organizations: structures, processes, and outcomes* (7th ed.), Upper Saddle River, NJ: Prentice Hall.
- Hall, S., Held, D., & McGrew, T. (eds) (1992). *Modernity and its Futures*. Cambridge Polity Press in conjunction with the Open University.
- Hammer, J. (2006) (in press). Agency and authority in role-playing “texts”. In: M. Knobel & C. Lankshear (Eds). *A New Literacies Sampler*. New York: Peter Lang.
- Hegel, W.F. (1977). *Phenomenology of spirit*, Oxford: Clarendon Press.
- Hegel, W.F. (1975). *Aesthetics: Lectures on fine art*, Oxford: Clarendon Press.
- Heidegger, M. (1977). *The question concerning technology and other essays*. New York: Harper and Row Publishers.
- Hirumi, A. (2002). The design and sequencing of E-learning interactions: A grounded approach. *International Journal on E-learning* 1 (1), 19–27.
- Hofstede, G. (1980). *Culture’s consequences: International differences in work-related values*. Beverly Hills: Sage.
- Hofstede, G. (1986). Cultural differences in teaching and learning. *International Journal of Intercultural Relations*, 10: 301-320.
- Hoodfar, H. (1992). Feminist anthropology and critical pedagogy: The anthropology of classrooms’ excluded voices. *Canadian Journal of Education*, 17(3), 303-320.
- Howie, S., & Scherman, V. (2008). The achievement gap between science classrooms and historic inequalities. *Studies in Educational Evaluation*, 34, 118–130.
- Jackson, P. (1991). The cultural politics of masculinity: Towards a social geography. *Transactions of the Institute of British Geographers* (New Series), 16(2), 199-213.

- Jaffe, M., Lee, Y., Huang, L., & Oshagan, H. (1995). *Gender, pseudonyms and CMC: Masking identities and baring souls*. Paper submitted for presentation to the 45<sup>th</sup> Annual Conference of the International Communication Association, 1995, Albuquerque, New Mexico, USA.
- Jarrett, K. (2008). Interactivity is Evil: A critical investigation of Web 2.0. *First Monday* 13(3), March, Retrieved October 6, 2008, from <http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/viewArticle/2140/1947>
- Jasperson, J.S., Carte, T.A., Saunders, C.S., Butler, B.S., Croes, H.J., & Zheng, W. (2002). Power and information technology research: A metatriangulation review. *MIS Quarterly*, 26(4), 397-459.
- Kaplan, A. (1973). *The conduct of inquiry*. Aylesbury: Intertext Books.
- Karpov, Y.V., & Haywood, H.C. (1998). Two ways to elaborate Vygotsky's concept of mediation: Implications for instruction. *American Psychologist*, 27-36.
- Kasuya, M. (1998). Classroom interaction affected by power distance: Language teaching Methodology, classroom research and research methods. Retrieved December 5, 2008 from [http://www.cels.bham.ac.uk/resources/essays/LanguageTeaching\\_Methodology\\_\\_MichikoKasuya\\_.pdf](http://www.cels.bham.ac.uk/resources/essays/LanguageTeaching_Methodology__MichikoKasuya_.pdf)
- Kekwaletswe, R. (2007). Social presence awareness for knowledge transformation in a mobile learning. *International Journal of Education and Development using Information and Communication Technology*, 3(4), 102-109.
- Kember, D. (2001). Beliefs about knowledge and the process of teaching and learning as a factor in adjusting to study in higher education. *Studies in Higher Education* 26(2), 205-221.
- Kerr, E.B. (2004). *Computer mediated communication systems: Status and evaluation*. (Ed: P.R. Monge). New York: Academic Press.
- Kinchloe, J., & McLaren, P. (1994). Rethinking critical theory and qualitative research. In: N. K. Denzin & Y. S. Lincoln (Eds.). *Handbook of Qualitative Research*. (138-157), Thousand Oaks, CA: Sage.
- Kiesler, S., Siegel, J., & McGuire, T. W. (1984). Social psychological aspects of computer-mediated communication. *American Psychologist*, 39, 1123-1134.
- Koper, R., & Sloep, P. B. (2002). Learning networks connecting people, organizations, autonomous agents and learning resources to establish the emergence of effective lifelong learning, *RTD Programma into Learning Technologies 2003-2008*. heerlen: open universiteit Nederland. Retrieved September 2, 2006, from <http://hdl.handle.net/1820/65>
- Koskela, H. (2004). Webcams, tv shows and mobile phones: Empowering exhibitionism. *Surveillance & Society*, 2 (2/3), 199-215 Retrieved July 29, 2008, from [http://www.surveillance-and-society.org/articles2\(2\)/webcams.pdf](http://www.surveillance-and-society.org/articles2(2)/webcams.pdf)
- Koszalka, T. (2002). A cultural historical activity theory (CHAT) analysis of technology Integration: Case study of two teachers. *Syracuse University*, 492-502.
- Kozulin, A., Gindis, B., Ageyev, V., & Miller, S. (Eds) (2003). *Vygotsky's educational theory in cultural context*. Cambridge: Cambridge University Press.
- Kozulin, A. (1998). *Psychological tools: A sociocultural approach to education*. Cambridge, MA: Harvard University Press.
- Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukopadhyay, T., & Scherlis, W. (1998). Internet paradox: A social technology that reduces social involvement and psychological well-being? *American Psychologist*, 53(9), 1017-1031.

- Knobel, M., & Lankshear, C. (Eds). (2006). *A New Literacies Sampler*. New York: Peter Lang Publishing.
- Lankshear, C., Michael, P., & Knobel, M. (2000). Information, knowledge and learning: Some issues facing epistemology and education in a digital age. *Journal of Philosophy of Education*, 34(1), 17-23.
- Latour, B. (1993). *We have never been modern*. London, UK: Harvester Wheatsheaf.
- Lehmann, U., Andrews, G., & Sanders, D. (2000). Change and innovation at South African medical schools -An investigation of student demographics, student support and curriculum innovation. Durban: *Health Systems Trust-Research Programme*.
- Lenhart, A. & Madden, M (2007). Social networking websites and teens: An overview. Pew Internet and American life research. *Pew Internet Project Data memo*, January 3, 2007.
- Leontiev, A. N. (1981). The problem of activity in psychology. In: J.V.Wertsch (Ed). *The concept of activity in Soviet Psychology*. Armonk, New York: M.E. Sharpe.
- Leontiev, A.N. (1978). *Activity, consciousness and personality*. Englewood Cliffs, NJ: Prentice Hall.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications.
- Lomas, C., & Oblinger. D. (2006). Student practices and their impact on learning spaces. In: D. G. Oblinger (Ed). Learning spaces. *EDUCAUSE*. Retrieved September 7, 2008, from [www.educause.edu/learningspaces](http://www.educause.edu/learningspaces)
- Luria, A.R. (1976) *Cognitive Development: Its cultural and social foundations*. Cambridge, Mass.: Harvard University Press.
- Macdonald, C.A. (1999). *Language policy and language across the curriculum in Grades 3, 5 & 7 for the Benoni/Brakpan district*. Two unpublished reports. Johannesburg: Joint Education Trust.
- Madison, D.S. (2004). *Critical ethnography: Method, ethics and performance*. Thousand Oaks, US: Sage Publications.
- Markus, M. L. (1983). Power, politics and MIS Implementation. *Communications of the ACM*, 26(6), 430-444.
- Marsick, J.V., & Watkins, K.E. (2001). Informal and incidental learning. *New directions for adult and continuing Education*, No. 89, Spring, USA. Jossey-Bass.
- Marton, F., & Saljo, R. (1976). On qualitative difference in learning.1. Outcomes and processes. *British Journal of Educational Psychology*, 46, 4-11.
- Marx, K. (1975). Economic and philosophical manuscripts of 1844. In: *Early Writings*, Harmondsworth: Penguin.
- Marx, K., & Engels, F. (1970). *The German Ideology*, Part I, New York: International Publishers.
- Maxwell, J.A. (1996). *Qualitative Research Design*. London: Sage.
- Mazer, J.; Murphy, R.; & Simonds, C. (2007). I'll see you on Facebook: The effects of computer-mediated teacher self-disclosure on student motivation, affective learning, and classroom climate. *Communication Education*, 56(1), 1-17.
- McPherson, M., L. Smith-Lovin, & Cook, J. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology*, 27, 415-444.
- Mercer, N. (2008). The seeds of time: Why classroom dialogue needs a temporal analysis *Journal of the Learning Sciences*, 17(1), 33-59.



- Mercer, N. (1996). The quality of talk in children's collaborative activity in the classroom. *Learning and Instruction*, 6 (4), 359–375.
- Miles, M.B., & Huberman, A.M. (1994). *Qualitative data analysis: An expanded sourcebook*. London: Sage.
- Moja, T., & Hayward, F.M. (2005). The changing face of redress in South African higher education (1990–2005), *JHEA/RESA*, 3(3), 31–56.
- Monahan, T. (2002). Flexible space and built pedagogy: Emerging IT embodiments. *Inventio*, 4 (1), 1-19.
- Morrow, W. (1994). Entitlement and achievement in education. *Studies in Philosophy and Education*, 13, 33–37.
- Mustafa, K. (2006). Cultural identity crisis in the age of globalisation and technology. *The Turkish Online Journal of Educational Technology*, 5(1), ISSN: 1303-6521. Retrieved March 5, 2009, from [http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content\\_storage\\_01/0000019b/80/3d/cd/6e.pdf](http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/3d/cd/6e.pdf)
- Myers, M.D. (1999). Investigating Information Systems with ethnographic research. *Communications of AIS*, 23, 1-20.
- Nash, J.M. (2006). Relating IS student throughput to English proficiency, *Sacla Conference 2006*.
- Nash, J.M. (2003). *Quality assurance self-review report*. Department of Information Systems, University of Cape Town.
- National Assembly Internal Question Paper No 22/2006. Retrieved March 27, 2007, from <http://www.education.gov.za> Parliamentary updates
- Neuman, W.L. (1994). *Social research methods: Qualitative and quantitative approaches*. Needham Heights, MA: Allyn and Bacon.
- Ng'ambi, D. (2004). *Towards a knowledge sharing framework based on student questions: The case of a dynamic FAQ environment*. PhD thesis. Department of Information Systems, UCT.
- Noveck, B.S. (2006). Trademark law and the social construction of trust: Creating the legal framework for online identity. *Washington University Law Quarterly* 83(6), 1733.
- Oblinger, D.G., & Oblinger, J.L. (eds) (2005). *Educating the Net generation*. Boulder, Colo: EDUCAUSE.
- Orellana, M.F. (1996). Negotiating power through language in classroom meetings. *Linguistics and Education*, 8(4), 335-365.
- Otto, H.C., Kutscher, N., Klein, P.A., & Iske, P. (2005). *How do young people use the Internet? Results from empirical research about online use differences and acquiring patterns of young people*- Revised Edition–June 2005, Federal Ministry for Families, Seniors, Women and Youth (BMFSFJ).
- Otto, L.; & Featherman, D. (1975). Social structural and psychological antecedents of self estrangement and powerlessness. *American Sociological Review*, 40(6), 701-719.
- Paas, F., Renkl, A., & Sweller, J. (2003). Cognitive load theory and instructional design: Recent developments. *Educational Psychologist*, 38(1), 1–4.
- Palonen, T., Hakkarainen, K., Talvitie, J., & Lehtinen, E. (2004). Network ties, cognitive centrality and team interaction within a telecommunication company. In: H. P. A. Boshuizen, R. Bromme, & H. Gruber (Eds). *Professional learning: Gaps and transitions on the way from novice to expert*. Dordrecht: Kluwer.
- Park, P. (1993). What is participatory research? A theoretical and methodological perspective, In: P.Park, M. Brydon-Miller, B. Hall & Jackson, T. (Eds). *Voices of*

- Change: Participatory Research in the United States and Canada* (1–19), Toronto: Ontario Institute for Studies in Education Press.
- Patton, M. (1987). *How to use qualitative methods in evaluation*. SAGE publications.
- Patton, M. (1990). *Qualitative evaluation and research methods*. Newbury Park, CA: Beverly Hills: Sage.
- Petersen, S. (2008). Loser generated content: From participation to exploitation. *First Monday*, 13 (3) Retrieved May 7, 2009, from <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2141>
- Pettenati, M.C., & Cigognini, M.E. (2007). Social networking theories and tools to support connectivist learning activities. *International Journal of Web-Based Learning and Teaching Technologies (IJWLTT)*. 2(3), 39-57.
- Polit, D.F., & Hungler, B.P. (1999). *Nursing research. principles and methods*. New York, Baltimore: J.B. Lippincott Company.
- Portes, P. & Vadeboncoeur, J. (2003). Mediation in cognitive socialization: The influence of socioeconomic status. In: A. Kozulin, B., Gindis, V., Ageyev, S., & Miller (Eds). *Vygotsky's educational theory in cultural context* (371-392), Cambridge: Cambridge University Press.
- Postmes, T., & Spears, R. (2002). Behaviour online: Does anonymous computer communication reduce gender inequality? *Personality and social Psychology Bulletin*, 28, 1073-1083.
- Postmes, T., Spears, R., & Lea, M. (1998). Breaching or building social boundaries? SIDE-effects of computer mediated communication. *Communication Research*, 25(6), 689-715.
- Prensky, M. (2006). *Don't bother me mom-I'm learning*. Minneapolis: Paragon House Publishers.
- Quan-Haase, A., Wellman, B., Witte, J. & Hampton, K. (2002). Capitalizing on the Internet: Network capital, participatory capital, and sense of community. In: B. Wellman & C.Haythornthwaite (eds.). *The Internet in everyday life*. Oxford: Blackwell. In press.
- Quan-Haase, A. & Barry Wellman, B. (2004). How does the Internet affect social capital. In: M. Huysman, & V. Wulf. (Eds). *IT and social capital*. MIT Press: Cambridge.
- Richardson, C. (2005). Just Facebook me: Computer mediated communication and its effects on interpersonal relations. Self the scholarly essay. Retrieved March 7, 2008, from [faculty.ithaca.edu/tkerr/docs/selfandscholarly/richardson.doc](http://faculty.ithaca.edu/tkerr/docs/selfandscholarly/richardson.doc)
- Ritchie, S.M., Rigano, D.L., & Lowry, R.J. (2000). Shifting power relations in the getting of wisdom. *Teaching and Teacher Education*, 16, 165-177.
- Riva G., & Galimberti, C. (1998). Computer-mediated communication: Identity and social interaction in an electronic environment. *Genetic, social and general psychology monographs*, 124, 434-464.
- Rogoff, B. (1990). *Apprenticeship in thinking-cognitive development in social context*. New York: Oxford University Press.
- Rose, D. (2005). Democratising the classroom: A literacy pedagogy for the new generation. *Journal of Education*, 37, 131-167.
- Roth, W., & Lee, Y. (2007). Vygotsky's neglected legacy: Cultural-historical activity theory. *Review of Educational Research*, 77(2), 186-232.
- Roth, W. (2007). The ethico-moral nature of identity: Prolegomena to the development of third-generation cultural-historical activity theory. *International Journal of Educational Research*, 46, 83–93.
- Russell, D. L., & Schneiderheinze, A. (2005). Understanding innovation in education using activity theory. *Educational Technology and Society*, 8(1), 38-53.

- Salmon, G. (2000). *E-moderating*. Kogan Page.
- Saville-Troike, S. (1982). *The ethnography of communication: An introduction*. Oxford: Blackwell Publishers.
- Schensul, S. L., Schensul, J.J., & LeCompte, M.D. (2003) *Essential ethnographic methods: observations, interviews and questionnaires*. New York: Row and Littlefield Publishers.
- Sclove, R.E. (1993). A. Feenberg Critical Theory of Technology. (Review). *Science, Technology, and Human Values*, 18(3), 397-399.
- Selwyn, N. (2007). *Web 2.0 applications as alternative environments for informal learning-a critical review: Using ICT to change impact and outcomes*. A paper prepared for OECD-KERIS expert meeting-Session-Alternative learning environments in practice. Institute of Education, University of London.
- Sheeran, N., & Barnes, D. (1991). *School writing: Discovering the ground rules*. Milton Keynes: Open University Press.
- Shelly, G., Cashman, T., Gunter, R., & Gunter, G. (2008). *Teachers discovering computers: Integrating technology and digital media in the classroom*. Boston: Thompson Course Technology.
- Shulman, L. (1986). Paradigms and research programs in the study of teaching: A contemporary perspective. In: M. Wittrock (Ed.). *Handbook of research on teaching*. New York: Macmillan.
- Silva, L. (2007). Epistemological and theoretical challenges for studying power and politics in information systems. *Information Systems Journal* 17(2), 165-183.
- Simon, R.I., & Dipbo, D. (1986). On Critical ethnographic work. *Anthropology and Education Quarterly*, 17(4), 195-202.
- Soudien, C. (2007). *Youth identity in contemporary South Africa: Race, culture and schooling*. Claremont, South Africa: New Africa Books.
- Soudien, C. (2004). Constituting the class. In: L. Chisholm (Ed). *Education and social change in South Africa*. Cape Town: HSRC Press.
- Stetsenko, A. (2005). Activity as Object related: Resolving the dichotomy of individual and collective planes of activity. *Mind, Culture and Activity*, 12(1), 70-88.
- Stone, J. (2006) (in press). Popular websites in adolescents' out-of-school lives: Critical lessons on critical literacy. In: M. Knobel & C. Lankshear (Eds). *A New Literacies Sampler*. New York: Peter Lang.
- Stutzman, F. (2006). *Toward an Archival Approach to Digital Identity Management. Identity and Identification in a Networked World*. Graduate Student Symposium, New York, NY: New York University, June 2006 Retrieved July 15, 2009, from [http://fredstutzman.com/pubs/stutzman\\_iinwsb.pdf](http://fredstutzman.com/pubs/stutzman_iinwsb.pdf)
- Sullivan, P., Smith, M., & Matusov, E. (2009). Bakhtin, Socrates and the carnivalesque in education. *New Ideas in Psychology*, 27(3), 326-342.
- Thomas, P.R., & Bain, J.D. (1984). Contextual dependence of learning approaches: The effects of assessments. *Human learning*, 3, 227-240.
- Thorne, S. (2004). Cultural historical activity theory and the object of innovation. In: *New Insights into Foreign Language Learning and Teaching*. O. St. John, K. van Esch, & E. Schalkwijk (Eds), Frankfurt, Germany: Peter Lang Verlag. August 11, 2007, from <http://language.la.psu.edu/aplng596d/thorneinnov.html>
- Tidwell, L.C., & Walther, J.B. (2002). Computer-mediated communication effects on disclosure, impressions, and interpersonal evaluations: Getting to know one another a bit at a time. *Human Communication Research*, 28(3), 317-348.

- Tlabela, K., Roodt, J., Paterson, A., & Weir-Smith, G. (2007). *Mapping ICT access in South Africa*. Pretoria: HSRC Press.
- Toomela, A. (2008). Activity Theory is a dead end for methodological thinking in cultural psychology too. *Culture and Psychology*, 14(3), 289–303.
- Transformation and Student Life at UCT (2005). Overview of Surveys of Student Climate Retrieved August 10, 2009, from <http://www.uct.ac.za/usr/ipd/QA/news/regnatintl/StudentLife@uct.pdf>
- Trochim, W.M. (2001). *Research methods knowledge base*. Cincinnati, OH: Atomic Dog Publishing Company.
- Turkle, S. (1999). Looking towards cyberspace: Beyond grounded sociology, *Contemporary Sociology*, 28(6), 643-665.
- University of Fort Hare-SANTED II -South Africa—Norway Tertiary Education Development Programme (2006). *Student Access and Retention in a nurturing environment*. Annual Progress Report for the period January– September 2006.
- UCT Institutional Planning Department (2005). *Improving the quality and profile of UCT's graduates National comparative and institutional output data*. 2005 Ministerial Statement on HE Enrolment Planning. Retrieved June 12, 2009, from <http://www.uct.ac.za/usr/ipd/dept/escan/Session%206%20Quality%20of%20Grads%20J%20Hendry.pdf> [Date accessed: 2009-06-12].
- Utne, B.B., & Holmarsdottir, H.B. (2004). Language policies and practices in Tanzania and South Africa: Problems and challenges. *International Journal of Educational Development*, 24(1), 67-83.
- Van Dijk, T. A. (2001). Critical discourse analysis. In: D. Schiffrin, D. Tannen, & H. E. Hamilton (eds). *Handbook of Discourse Analysis* (352-371). Blackwell Publishers.
- Virno, P. (1996). Notes on the General Intellect. In: S. Makdisi, C. Casarino, & R.E. Karl, (Eds). *Marxism beyond Marxism* (265–272), London: Routledge.
- Vosniadou, S. (2007). Conceptual change and education. *Human Development* 50(1), 47-54.
- Vrasidas, C., & McIsaac, M.S. (1999). Factors influencing interaction in an online course, *American Journal of Distance Education*, 13 (3), 22–36.
- Weiss, E. (1998). Technical communication across cultures: Five philosophical questions. *Journal of Business and Technical Communication*, 12, 253–269.
- Wenger, E. (1998). *Communities of practice: Learning, meaning and identity*. Cambridge: Cambridge University Press.
- Wood, D., Bruner, J.S., & Ross, G. (1976). The role of tutoring and problem solving. *Journal of Child Psychology and Psychiatry*, 17, 89-100.
- Wu, C., Dale, N., & Bethel, L. (1998). Conceptual models and cognitive learning styles' in teaching recursion. *SIGSCE* 98, Atlanta, GA.
- Yin, R. (1994). *Case study research: Design and Methods*. New Delhi: Sage Publications.
- Vygotsky, L. (1998b). The problem of age (Trans: M. Hall). In: R.W. Rieber *The collected works of L.S. Vygotsky*. 5, *Child Psychology* (187-205). New York: Plenum Press.
- Vygotsky, L.(1978). *Mind in Society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Vygotsky, L. (1935/1978). Interaction between learning and development. In: L.Vygotsky. *Mind in Society*. Cambridge, MA: Harvard University Press.
- Vygotsky, L. (1934/1987). *Thinking and speech*. New York: Plenum.
- Vygotsky, L. (1930b/1981). The instrumental method in psychology. In: J. Wertsch (Ed). *The concept of activity in Soviet psychology* (136-143), Armonk, NY: Sharpe.

## APPENDIX A

### Interview with Information Systems Lecturer A

This lecturer taught the mainstream and Academic Development Programme (ADP) class (as a regular lecturer) and also interacted with the students using the three Facebook spaces-her inbox, the discussion board and the wall. The interview was audio-recorded using a Digital audio recorder and later transcribed for analysis. The lecturer explained how she interacted with the students on Facebook.

LA.1: I use Facebook to answer student queries. Most of the students have problems with understanding the theory aspects. They ask questions regarding the theory aspects. The person who teaches theoretical aspects [currently] is not me, so if they do not understand the concepts they come to me via Facebook.

The same applies to the practical aspects. For instance, if they have practical sessions and they do not go well with their tutors, they cannot tell me personally thinking that I could be angry with the tutor or with them, so they consult with me via Facebook, because they cannot see my face, they do not know even what I will be thinking. In Facebook they can at least hide their personality, and say things they cannot say face to face.

LA.2 Sometimes when I want to give them extra information about a topic, or when students do not know where to get extra information, I can post this information on Facebook. It is not all students but mostly those who have problems use Facebook a lot.

There is no social interaction there; I am only there to attend to their queries and to give them advice on how to go about their exercises and assignments.

They even “cry” there on Facebook ... (joke). Thus the advantage of Facebook, they can ask a question which they feel if they come to me, I could say this is a ridiculous question. But on Facebook they are able to ask it.

LA.3 Interactions with tutors are done via Vula and not Facebook. With tutors it is easy because every Monday there is a meeting. Whatever I want the tutors to do, I use that

Monday forum to express that. Alternatively, I use the E-mail or Vula to talk to them, and not Facebook.

LA.4. With regards communication with other staff I use e-mail but not that often as I see them around daily, so there is no need. Most of the time they phone and or they just pop in

LA.5. Student consultation on Facebook has impacted my lecture interactions because I get fewer queries in class because I would have answered all the questions on Facebook which are of relevance to most of them. Less students come to me also for consultation because most the questions would have been answered. You find that 50 students have the same query, so if I answer it on Facebook I would have answered them all.

LA.6. I attend to the X group which is the largest group on Facebook, via Facebook because I cannot attend to their queries all at the same time-the IS X class (but I am not currently teaching them), and the Y group (which is the smaller group that I am currently teaching). So I also attend to it via Facebook. Instead of going to the class to teach what I had taught the previous day, students pose questions on Facebook to indicate that the next time I come to the class, could I repeat that a particular aspect of the previous lecture. When I come to class, I do not need to ask the students what they did not understand for they would have alerted me already on Facebook and I could give the responses on Facebook right away, or I would address that immediately in class when I meet them- so it is really helpful.

LA.7. Educational benefit that could be derived from the use of Facebook include exchange of information with other staff members and students as well, and hidden personalities- people are able to complain more when their personality is not known. Some of the students fear the lecturers so they cannot come to complain face-to-face. Facebook allows us to know what really the students' problems in detail are. If you go to this class, a class of 300 students, and ask who has a problem, they are shy to raise their hand to say they have problems, but on Facebook they say it boldly.

LA.8 What I realise is that there are some students who do not know how to use Facebook still. These are student coming from disadvantaged backgrounds, which haven't seen

computers, so they are losing out- Such students do not even know about Facebook. Those who have been using it since high school are the ones posing the questions, so academics need to create some mechanisms for levelling the playing field possibly by creating Facebook accounts for students as soon as they arrive. Academics need a mechanism that is going to integrate this maybe initial training when students arrive in university and link them up by creating accounts for them in Facebook. But the problem is computer literacy. I don't think computer literacy training currently involves the teaching of Facebook usage. Students are already in the fourth week but some are still struggling with creating an account, although they had a session on how to create an account.

The other perception on Facebook by students is that Facebook wastes their time. Instead of studying and posing queries to me, they will be busy chatting and talking to their friends- keeping up to date. Facebook definitely wastes their time because instead of using it for the academic purposes they are using it for the social and they are also busy physically chatting.

The other problem is that one may also find that they do not know how to use it for educational purposes.

LA.9. We have many tools /interactional spaces for ensuring that learning happens outside in informal learning environments. These interactive tools include, The Web, Vula, Facebook, Labs, and they can also come to my office.

I use Facebook and Vula for maintaining contacts with students beyond the lecture. The students who have problems with Facebook have been going to Vula and they leave their messages or queries on Vula

The Department created a section/ application in Vula where students from this department could post their messages/queries on Vula and the lecturer can still answer them. Some departments have not done that. Some prefer to use Vula to post their questions because they are do not spent much of time chatting like they do on Facebook.

But the advantage of Facebook is that you can converse with anyone anywhere, while Vula is restricted to UCT. It is easier to network with Facebook than Vula. For

example, a student doing IS at UCT can network with a fellow student doing IS at the University of Pretoria, something which might be difficult with Vula. Vula is specific to UCT.

LA.10. Facebook interaction has impacted my consultations with students in different ways. Students who normally consult with me face-to-face are normally not on Vula and Facebook. So most of the questions they come and ask me I would have already answered them on Facebook. I “force” them to use Facebook or Vula, unless it is a specific question that I have not answered on either platform.

LA. 11. Online support is almost always available. I am online throughout working hours up to 5pm. I am on Facebook from 8-5pm. Even when I get out for lunch, the first thing I do when I come back is to open my Facebook account and answer questions immediately. For example, students could be doing a practical in the lab and they cannot ask their tutor, so they can pose the question and I answer and they can go on with the practical. But that depends on my availability, for example, if I am in a meeting or stepped out for lunch I cannot answer, but most of the time I answer the questions immediately. They can also come for f2f consultations from 9-11 am.

LA.11 Students now have better access to learning material than they had in the past. They have the Web and all learning material is provided on the websites. Especially Vula, thus where they get all the information that they need. The material posted on Vula is the standard material. But if I ask a question or assigns students to go and do some assignment on a particular topic, and they are confused on that specific task that is when they should consult on Facebook because most of them would be having the same problem.

For additional information or if they do not understand that is when they go to Facebook. Sometimes, I put more educational material on Facebook than Vula because I need them to use Facebook more.

LA. 12 In terms of their choice of learning material, I realised that most of them prefer to read the study guide, but many of them do not read the readings that lecturers give them. If they pose a question and I answer and further refer them to their study guide



they will comprehend it fast, because the study guide is what they read most. Most of them prefer online interaction to reading, as they do not like reading.

LA. 13. I do not see how Facebook is teaching them to think critically for they do not read. I think this lack of critical thinking skills is understandable because they are still young and are coming from high school. I cannot blame them for the lack for critical thinking skills but my concern is they do not read so that is the problem.

### **Interview with B**

The lecturer was the other staff member who also used Facebook and was interviewed on his relations with students. The interview was audio recorded and transcribed for analysis.

LB.1 Yes, we have for INF [course code given] and we will also use it [Facebook] in the second semester. The first assignment for that course has a compulsory assignment whereby the students had create a Facebook profile and had to join the IS Facebook group.

LB.2 The first purpose of Facebook use was to get them understand what information system is so they had to use the system to understand what information systems is. They also use it to share examples and study issues, and also to contact and send questions to their lecturers.

LB.3 Students engage in several activities on Facebook. But one such is they ask questions to the lecturers/ academics and those are generally questions about process, aspects of the course. They also use it to share information among themselves, and we are hoping they are going to start discussion threads as well. There is one or two but they haven't taken off too well.

LB.4. I am not too sure if tutors also part of these engagements with these students. You will have to ask the online administrator that. Theron (pseudonym of online administrator) actually runs the Facebook site from the academic side and she interacts with the students through Facebook. She is the course manager if you like. Currently, it's about queries and questions but we haven't got any other activities as of now apart

from these. They can start discussion threads for their own edification but they haven't started yet.

LB.5. Facebook impacted on their [student] interactions with lecturers. I think you have to remember that they is 800 something of them. So with a large class like that if each person wanted to spent one minute with a lecturer, this 800 minutes, which quite a lot. So that would mean that for many of them they could not have the time for one-on-one contact with the lecturer. Therefore they can get many things through Facebook. We can answer one question which 800 students can see the answer to instead of telling each person.

LB. 6. Well, our teaching has been influenced by Facebook use. I think it has made it easier simply because with so many students if you had to deal with all the students one-on-one it could take too long so you can refer to Facebook and say that question has been answered on Facebook so why don't you go onto Facebook. If we want to put an announcement we can out an announcement on Facebook as well. For an example, there is an announcement: The mid semester test which we can put on Facebook (*he shows that as he is typing an announcement on Facebook*)

LB.7. For academics, its (Facebook) an open easy channel of communication and you can communicate with all of the students fairly quickly. The other option would be to send an e-mail to each student so that could take a lot of time and effort. Facebook is convenient because most of them are looking up on Facebook. The benefit to the student is that 1) they get this information 2) the most important benefit is that they can network amongst each other. If for example, if a student has a problem with a certain aspect of their work they can put it on Facebook and hopefully the other students will say this is the solution, or this is where you should look or go. To me the biggest benefit is that student can use it to network amongst themselves, discuss issues and try and reach solutions.

LB.8 With regards possible integration with classroom practice, for me, the students are all using Facebook anyway, so you don't need to encourage them to use it, most of them are using it. So to start integrating it you have to use it for things like posting your messages, announcements and answering their queries

LB.9 We have many strategies in place that extend learning beyond the classroom environments. The whole laboratory sessions, and we first teach principle in class (theory) and they then do and practice it in the lab, we then review that in a lecture and tell them where they went wrong and where they were right etc, and then we have another session in the lab so they can now 'fix' the previous mistakes. One of the things that we can do which we are not currently doing could be to include the review onto Facebook. These could be broad and general comments not comments on specific students.

LB.10. Yes, student use learning management systems (Vula). All their announcements are on Vula, calendars are on Vula, they do all their tests on Vula. They have to hand in all their assignments to Vula. And if you look at Vula we don't give them any paper, all their assignments are handed electronically to Vula. If you look there (*showing the scheduled test announced on Vula*), quiz, extra classes, all the lecture slides are put onto Vula. There is a forum here on Vula where they can log on, they vote on Vula for class reps, all assignments are handed in through Vula, the class has link to DFAQ on Vula, they can sign up on Vula for labs . We try and do as much as possible.

LB. 11 It (use of Vula) has made our interactions much easier and I don't think we could have been able to run such a course without Vula because there are a lot of queries and if I had to collect all the stuff manually. If you think about 820 students and I have to collect the scripts and if each of them submit one script, I would collect 820 scripts in total and it's very easy to lose one. By submitting all to Vula we don't lose any papers. If you think about 800 students doing a quiz, we could mark the quiz, but Vula marks it automatically for us by the way. So we get the marks instantly. The other thing which Vula does which would be almost impossible to do manually is that the 820 students all write a different test. What we do is that we put a 100 questions, and we tell Vula to randomly select 10 for each student, so each student get a different 10 questions. So it's much harder to cheat or anything else and we have a timeout system. So they have 5 minutes to do the test and after which Vula switches off so there is no cheating. If we did it on a piece of paper, think about it. If I am seated here I could easily copy the dots that you are outing in from here and if you say stop how would you know that all stopped? Then you had to collect all the 820 scripts back and

then you will have to send to Information and Communication Technology Services (ICTS) and you get their computers to mark, so you can see that extra administrative work. So we are saving a lot of time and effort by using Vula.

LB 12. Facebook is not as useful as Vula. UCT doesn't control Facebook, so we only therefore use Facebook for communication. We don't put any assignment or anything like that on Facebook.

LB. 13. It reduces the consultation because they can see it through Vula.

LB.14. They can use any of those Vula, DFAQ, Facebook or face to face.

LB. 15. I wouldn't say a lot [in terms of how Facebook affects student access to learning material] because we don't put any learning materials there. The only thing I can think I know of is that if a student asks for help from another student they might get it through Facebook. Someone might say you might find that book or try this one. It wouldn't be formal through us but among themselves.

LB.16. Again, I am guessing [its impact on student self regulation] it would allow them to see what their peers think which can be useful in the sense that if you think that you are the only student who doesn't understand the course and then you see on Facebook there are other students who doesn't understand. And I think the biggest benefit of Facebook is that they know that it is not run, manipulated or controlled by UCT. We don't have any say on Facebook, I can't delete anything and I can't say what should be or should not be on Facebook. They feel that they own it. Whereas Vula is seen as a UCT thing, no matter how I tell them that Vula is run from Centre for Higher Education Development (CHED) and I can't run it, they still see it as part of UCT so I have power to do things on Vula where as they feel I don't have any power on Facebook.

LB. 17. I don't know [which application they prefer Vula or Facebook] but what i know is that they have to use Vula to complete their assignments, but the day they arrived many, many already knew Facebook, which was the other reason why we used Facebook. The majority knew it and have already used it so the obvious benefit was

that it was something they knew and it was something they had brought with from outside. So they feel it's not a UCT thing.

LB.18. I haven't interrogated much on that [on what impact Facebook has on student critical thinking] but I feel that it had allowed them to see that not everyone has the same view.

## LECTURER C

LC 1 Thus a very broad question. (*Sighs a bit*). It's always difficult when you are teaching a large class. In IS102F there were 800 and in 102S there were 500. These a service course, it's not a compulsory course. Therefore a lot of students are not interested, they know they are not going to continue with the subject, so it's (*coughs*) hard to make them interested. Ok. Most of them see it as a waste of time.

LC 2 (*Remains silent for some seconds*) Again with such large classes, there is not a lot of interaction because one can try on one or two questions, but because they are so many, it's too difficult. It's quite impersonal compared to a small class where you get to know one or two faces et cetera. Because they are so many, you do get to know one or two out of the five hundred or eight hundred, but the interaction in class is therefore sadly limited. When you do ask a question because they are so many, they don't want to answer because no-one wants to be the person that sticks up their hand. You know what I mean.

LC 3. Last week I asked some questions, and they were simple questions, just to try and engage them. For example how many of you did Art at school. It's either yes or no, it's very easy and still it was reluctance. Then I said surely you were in Metric last year you should know whether you did art or not. It's not like a difficult question. But they were kind of worried that what I was going to ask after that, if someone is going to put up their hand they knew I was going to ask who painted eh

LC 4 (*Sighs deeply*) Now that is a very loaded question. Why are you asking that question?

- LC 5. I suspect many of the first year students treat males with more dignity and respect than they treat females. However, this week it has come to my attention that this is definitely the case. Eh, in fact I have asked Dr Tuverson (pseudonym), Transformation representative to step in to speak to the class because of an incident which happened whereby they, some members of the class might have made comments about one of the female lecturers.
- LC 6 No, they were written comments, but they have a sexual overtone but they are also stripping her off her dignity and obviously it's embarrassing for her and awkward for her to have this kind of thing. So it's difficult. I think they definitely, definitely look on females differently.
- LC 7 Its quite possible
- LC 8 Patient I think it's probably socialisation. I think it's probably where they come from. It's probably the family situation where most children come seem to be more frightened of the father than the mother. I don't know why. I think it might also be the schooling system et cetera. Figures of authority in our social system tend to be males. I mean all the top managers are males, the people who discipline, the police tend to be male, president is male, and magistrates are males. By and large its male dominated and I think they see that particularly when there is a crises, or some kind of punishment or whatever, its mostly the male who is instigating that and delivering it. But I could be wrong.
- LC 9 No, although they tend to seat in the same place and they tend to group themselves in social groups by and large, if you like. It's in 2008 and it's sad, my observation again is that you get groups of white students, groups of black students, groups of Asian students mostly seating together. And when they are seating next to someone else, it's just by accident but they are not actually with that person. You know what I mean. If it's a row like this, and there is four people seating there, those four will be in one group and the other four will come and seat next to them but these four won't talk to that four. They will be two separate groups all together. And even when we ask them to form groups to do projects, when you look at the groups, they tend to be by and large split along gender and racial lines. So you get groups of four all black girls, four white girls, four black males et cetera. You don't tend to find a group of black male, white male, white female kind of thing.

LC 10. (*Is silent for a moment*) I think. Where were you born?

LC 11 I think in S.A we have heard, separation under Apartheid for so long. It go into, if I could say that, in to the hearts and minds of the people and now we don't have separation, legally we don't have any laws that divide people into groups, but I think it's still in the heads. Ok. I think you can you can change the laws which we have done in South Africa, but in reality, if you look around South Africa, there is no more Group Areas Act, for example.

LC 12 Is it! If you look at South Africa, we have been independent for 14 years now but if you look at an area like [former White suburb], it's still predominantly whites, [Another former white suburb] is predominantly whites. [Former Black township] is predominantly Black. Even through the laws have gone, Apartheid has been hard to dismantle. Even if you look at the schools, I was looking at the children from a school yesterday, I just happened to see them all in a bus and they were all coloureds. It's one school and they were all coloured. I don't know what the name of the school was but they wear red tops. I didn't see any whites there or any blacks. Again that's a homogenous school. I know people will give me reason that its because they all live in that area but its back to that same thing. The school could be situated in say [urban area] and all the people go there and the same if you go to a school in [Former Black township], it's most likely that it is going to be 100% black.

LC 13 Possibly yes, you see, but I don't have any evidence but if you take a school here, [a elite former white high school] as an example, you probably see that [this high school] has gone out of the way and they have made a special plan to include some black people. I don't know exactly what they have done, I have nothing to do with that school. But if I drive past [same high school] I see that the majority of the kids are whites but there are quite a few black kids. You probably find that those black kids have been selected (*he demonstrates using both hands that they have been handpicked*) and I don't think that they are randomly coming. So they tend to choose black kids who, for the lack of a better term, fit in.

LC 14 No in terms of the mindsets et cetera. You know someone once said to me, they asked me the question. It was a particular person at UCT which they said was white when he was clearly black and I said but he is not. But he fits in with the whites, thinks like the whites, educated among the whites and lived his whole life with the whites so he is not really a black. I don't know if that make sense. I think that these are difficult issues and we could get into the stage where instead of breaking these barriers and instead of having this open society, we are supposed to have, I think some of the barriers and perceptions and things like that are beginning to strengthen again. What I mean by that is that in the old days [name of a former Black township] was a township and it was for black people only. [Former white suburb] was a suburb, even the name was different and it was for white people only. Today technically, thus all gone but people still call [a former Black township] a township they won't call it's a suburb. We even have what we call township tours and they don't talk about suburban tours. So we still use the same words. Ok. If you think of [a former Black township], you think of it as a black township and it's still not seen by many people as part of Cape Town. Whereas if you think of [a former white suburb], people still think of it as a white suburb. Although there are a cluster of other people who live there, its predominantly white. Neither of them has changed much. Probably [a former white suburb] has changed more than [former Black township] has. I don't know of any white or coloureds who go to [the same former township]. [Former white suburb] I see a lot of them there, I don't know whether they live there or bring their kids to school there.

So our students getting back to them, they are coming from those segregated environments. So they are still segregated, you use any words you want , but they are still coming from segregated environments. So if you take two boys who both come from [elite college in S.A], one white one black, the white kid will probably come from a home in [posh suburb in Cape Town], living close by. The black kid is highly likely that he is imported from [former Black Township] because he is good at sports, he is good at academics or he scored good grades, something like that. But both will know that they are not from the same place.

LC 15 Yeah. In think that the black kid will feel not totally part f that because he is almost bused in like they did in America and at the end of the day he is bused out wherever they come from. So during the school day the period might be "living normally" if



you may want to call that and I think it's the same here. So you look at our students they are all in the classrooms together, in the lecture rooms, there is theoretically no difference but when they walk out they go in different directions.

LC 16 Yes because it's this group which goes to this area, they have electricity, running water blah blah and this group goes out there where things are not so good. If you go to the residences, the same patterns are evident.

LC 17. Yes it [race] does. Again it's a perception, I don't have facts for this. But I have heard students actually tell me this. They said they believe or feel that the best lecturers are the white males and that if they get a black lecturer, they are getting a second class lecturer, he is not as good as the white lecturer. And again I think the reason for that is if you look back again at the school system, the headmasters, the teachers at the best schools (school with the best results) they happen to be white males because it's the school system. If you look at the poorest schools in [former Black township], who do they have? Black heads. You don't have to be a genius to look at the two schools, this school has nice cricket fields, grounds all the kids are in smart uniforms, all the kids pass metric. You look at that school its run down, doesn't have nice grounds, the kids are poorer, half of them fail metric et cetera.

LC 18 No, It's back to Apartheid because apartheid separated them. The apartheid state spent, I can't remember the stats R10 per black child and R100 per white child something like that. Then they come to university, and again what do they see? The professors and the lecturers are white males. Again the perception is that the best guys to listen to are those guys. They have the power, they are obviously the most important, they are the most intelligent et cetera. Because look where they are! So I think that those kinds of perceptions are reinforced by things like that- by what people see and say.

LC 19 I don't think it's a fact. I think it's because of in South Africa in particular, what has gone off in the past. But I don't think that we could say that it's a fact because if we look around, we had a international visitor earlier this year, a Professor from Canada and he is one of the top professors in IS and he is black. So clearly you cant say that is

a fact. You can't say that they are less intelligent. Clearly that is bullshit. The guy there, in fact the two top people we had this year—one was a black male and the other one was a white female and the white female was a lesbian. That again caused all sorts of issues because many people still discriminate against people's sexually. So if someone say I am lesbian and this happened, people didn't want to talk to her. People felt uncomfortable et cetera. Had she not said that because that's something you cannot visibly see. I can see you but I don't know what your sexuality is. But once you disclose it, it makes a difference. Our constitution say we don't discriminate against people sexually, you can choose any sexuality you like. But the minds (*heightens his voice*) and the hearts still say no ways!

LC.20 Yes, your President doesn't like that. The President of Iran recently said that there are no homosexuals in Iran. It's a fact, there aren't any. But again, if you are a homosexual in your own it tell you that you don't belong and you aren't part of that society. What is going to happen is that you are going to live alone and I think many people live that same line. It might not been in terms of sexuality but in terms of race where you try and live as if you are not what you are. But we also have to be careful that we don't go too much down this ethnicity route. I was listening to a very, very interesting talk last night at UWC and Allan Woolsack said that we have to be careful of the dangers of ethnicity because isn't it another form of racism?

LC 21 That is it. We have just had this whole thing in South Africa about xenophobia and that is part of this ethnicity. It's black people in South Africa saying that those black people are not part of us. They are different to us in some ways. Of course that is racism but people are trying to cover it up and say it's not racism because it's black on black but to the victim it doesn't matter the hell you call it and its still ethically wrong. It morally wrong, ok and you can't by addressing it in other words try to cover it up because it basically the same thing. It wrong and I felt aaah, and I might be wrong, you know a couple of years ago in Bosnia there was this guy who engaged in ethnic cleansing. What he wanted to do was to create a white Christian Serb and he tried to kill all the white Muslims in Bosnia and they have called it now genocide, which I think it was. But that people say it is a form of ethnicity although it was a bit

different. What difference does this make? If we had allowed our xenophobia attacks to continue that could have been ethnic cleansing. It appears that some of those people could have been quite happy by saying let us kill these people which is a huge step along. And if you watched and listened to what some people said, it was very scaring. I saw pictures on the TV of people looting stores, being happy saying I have stolen this thing you know. Then they interviewed a number of people and they said these people must go they are criminals, all of them are criminals. They are stealing our job at cetera, at cetera. It's almost too easy to blame someone else and get people into that kind of mentality that it's us against them. We target them. In Thailand we had a similar experience.

LC 22 Again I see that it's the older who is seen as the more important and learned, more knowledgeable. I think that the students have been conditioned to give older people more respect where as when someone is young they tend to say she is similar to us what the hell does she know

LC. 22 I think it's a similar thing. You know if you say I am a Professor, I think it immediately rings and some people are very weary of that. One of the things I have noticed is that some students, the first years and they all call me sir. And that is kind of from the school system. Certainly the white schools had to call the school teacher sir. So I think that comes from what you are used to doing. And it basically make it the "us" and "them" situation. Isn't it?

**LC. 23** You are lower than us and we are the higher class, whatever you want to call this. You will respect us and you will address us by a dignified title whereas we can call you whatever we want to call you (*we both laugh*). So my approach has always been if you want me to call you by your first name, then you must have the same privilege to call me by my first name. If we want to go into the whole titles business then I must call you Mr, Dr whatever and you must call me Mr, Dr whatever. But otherwise let us just call each other what we are. But when you say "You have to call me sir but I can call you Joe, David or whatever your name is thus already entrenching a hierarchy. Its

saying I am more important, I am more senior and thus the only relationship we have and I think that is good for a conducive learning environment

LC. 24 One interesting student that several students make was that Facebook is not run by UCT so they see it as something separate and therefore something not controlled because you can't get to them. Whereas they are kind of implying that any that is run by UCT, UCT can use it against them. UCT can be monitoring what I am doing that sort of thing so I guess there is that fear that a UCT thing can be used against me or something. Whereas for Facebook we know its run from America by somebody over there. We know that even if [ the lecturer's name] asks them who text this message they would say dhaaa dhaaa ( *Shaking his head to show they could resist giving that*). But if it is a UCT thing like Vula, although theoretically run from [a Centre at UCT], UCT will possibly tell [the lecturer name]. So the first group and I think Theron is a good person to speak to about that because she had a lot of interactions on Facebook. I think it was helpful because I think sometimes they asked questions in class which they didn't ask in other fora and it might be because of that fear. I don't want other people to see that I asked that question, I don't want to see whoever I am on Facebook. And of course a lot of them were already on Facebook so it was something that they were used to and it was something they were excited about and all their friends were using it. So instead of using Vula something new they have never heard of and it's sort of controlled by the system. Facebook its fun and they almost felt it's theirs.

LC.25 I think it does, I think it (Facebook) puts them on a more equal footing. They also feel that they know it better than we do because they have been using it more. So rather than us teaching them they kind of feel that they already know it so they are empowered. So it's not something new which they have to figure out and I think thus quite of a nice safety zone to be because whenever I show you something new like Vula, you battle to get it, you are a bit uneasy about it. But if you have been using it for a while, you use it for one course and the next course it Vula, then it's ok because you have done it before. I am finding this semester students who are doing the same course are far more at ease with Vula because they have been in UCT for half a year

and they have been using it. Whereas the once who started in February they have never heard of Vula. So the same can be said of Facebook.

LC 26 I think we need to have open door policy with students who are coming. It saddens me when I see some universities with lecturers who are behind closed doors and closed gates where student can't just walk in. I think the breaking down of the titles story and the students can call me [name given] or [initials used] and thus fine and I think that kind of breaks it down as well.

I think we need to show them that we are human beings we are not these towering figures and we also make mistakes. We need to give them an opportunity to find their voices to allow them to ask questions. But more than just allowing them to ask questions but to encouraging them to ask questions and to teach them how to ask questions. I think one of the things that we don't do at school and what we don't do enough in university is to teach how to ask questions. It all about answering questions, which is not the same thing.

If you know how to ask the right questions you are going to further along. I always give an example, if you go to the bank and you want to invest your money there and you ask the wrong questions, they will give you the answers to those questions but they might make you make the wrong decisions. If you have R10 000, what you want is that it grows as far as possible. If you go to the bank and depending on whom you ask for in the bank. If you ask someone who is dealing with savings accounts, the only services they are going to talk about are savings accounts. If you ask the one dealing with unit trusts, she will not talk about savings accounts but unit trusts because their commission is on unit trusts that they sell. So you need to ask the question to see the person who deals with all investment options. So if you ask the wrong questions, you are going to have an answer but that won't answer exactly what you want. I think i often we don't think through the questions carefully. One of the things that I do for senior students-third years and honours students is that I pose a scenario where they have to pose a question. So I say in this scenario what questions would you ask? And students don't like that, they prefer to answer questions. But look at what you are doing research is about asking questions. A lot of business that we do in life is asking questions. Sometimes it's difficult to ask questions because people can intimidate

you. If remember history, the challenger that went out to the space, and those two people died. There were two people in that committee when they decided to launch it who know that there was a problem with the ion (a gas) went below a certain temperature it disintegrated. But they afterward they did admit that they knew about it but they didn't say it in that meeting. Why didn't they? Because it was a big meeting and there were a lot of people and they felt maybe the problem is solved, and I don't want to be the idiot who is going to say there is a problem. So these two knew and they said nothing. They didn't ask the question and as a result those two people died. You know the Bay of Pigs when President Kennedy invaded Cuba. There is a general who later admitted that he knew about the Bay of Pigs because he had been there and he knew. If you look at the map, it's a round bay like that , it's a beach this side and there are high rocks here (*the other side*) so landing is not very nice there because as you land your troops, the guy on the rocks can nicely mark your troops because they are on the white sand. Remember there is nothing on the beach it's just sand. So as you come out you are a nice target. The guy on the rocks can say taa taaa (shooting), because where can you hide on the sand? There is not even grass to camouflage yourself there. So the general knew but asked later that how could he challenge President Kennedy – he was the President of the United States! So again he didn't say anything and the troops were killed. The reason why he didn't ask a question is that because of fear. So isn't it that we are getting into dangerous situations. Your President has gone this far because people never ask questions. He started ok and was actually very good and he did a lot of good things and then what happened I think is that people stopped asking questions. So they did not challenge him because they thought he is the boss and many times we almost make people like that. if we start a discussion and every time you have the right answers, you will also start to believe that its you who have all the answers. So we can't blame you totally because at times they shield the person from things as well because they don't take people into areas where people are deprived or are starving etc. ...This do not just happen with Presidents but everywhere where power dynamics are involved....We do that and inn the process we undermine ourselves. One of the things that we need to do with the students is that we should encourage students not to just accept things but to encourage them to ask questions. But the problem is that when they move into the world the boss say, this is the way we do it here.

## Interview Lecturer D

- LD 1 My first experience of teaching UCT students was from 2005 when I taught them a practical course: How to use Microsoft Excel. Of course the way the course is structured because of the student numbers, they are over 700 students so in theory the class is very big. So I would go and demonstrate Microsoft excel in class and in the following week on a Tuesday these students would go to the lab for tutorials so that they can be helped by the tutors with the practical exercises. So for some students, who had practical experience with excel packages it was easy. Of course for some it was very difficult because they were not experiencing Excel as I teach they were just seeing me use it in the class but they were not experienced at using it. They had problems in tutorials trying to relate what is taught in class and what is shown to them in the tutorials
- LD 2. Thus right, I was presenting a practical basically demonstrating to the class and the students did not experience or feel how to use this particular package in class. So I think for them there was some disconnection. But for those who already had an experience, it was not much of a problem.
- LD 3 Umm factors?. First of all there is very minimal interaction between the lecturers and the students. I think the student number is just too big. For instance in one session they were over 300 and then 45 minutes maybe much but then the material which needs to be covered within that time is a lot. So you find that you are hurrying so that you are not caught up with time. That is the biggest thing that I realised. For a lecture, I need to balance, I need to finish on what I teach because they are going to be tested on it next week in a tutorial exercise but also I want to maintain interaction which is (already) very minimal. Once in a while I pose for questions or I may ask questions but I may not get any responses or students at the back might say that they didn't get me. So generally there is minimal interaction.
- LD 4 Yeah there are students who ask questions but the issue that I realised even as a student with asking questions is that normally you have to ask them to repeat the

question and you are forced to move closer to them. Remember they don't have a microphone and you have a microphone so you get closer to get what they are saying or another student closer to them relays the information to you. I think that sort of discourages the students (from asking questions), it's just my thinking. So even when you encourage students to ask questions, they don't ask because of the distance between the students and the lecturer.

LD. 5 The physical distance and of course the fact that they don't have a microphone. The fact that you are using a microphone already shows that there is already a problem with communication. But now the students do not have the same. Obviously there is a break down in how they pose their question. At least for me every time a student asks a question I will ask them to repeat so that I am able to hear it more clearly before I answer. Then also for UCT in terms of interaction, there is also the issue of accent. And I notice at times I take advantage of it, when I am teaching and then students laugh at how I pronounce certain words. That in a way is a factor, I don't know whether its diversity or what. So you find different lecturers have different accents. It may be having a positive or negative impact so I sometimes use that to make the class relax but sometimes I pronounce words in two different ways so that they get to understand. You find that Zim students pronounce certain words differently from Kenyan students so you have to try and be accommodative as possible in terms of how you pronounce words.

LD.6 I don't think I have used it too much. I have just used it to (*nothing said*). What I normally do is that I talk more slowly so that as much as possible the words become clearer. So I may not talk the way I do in a normal set up so that people interpret what I am saying as we go along.

LD. 7 I have not thought about that but I don't see it mattering.

LD.8. I have not been in a lecture taught by a female lecturer. But sometimes I have heard while others are talking that this class is problematic and these students are making a lot of noise. But I have normally noticed that when I go to class and I ask for their attention and to settle down. They normally do settle down but in some classes there is still some noise subdued noise going on as you are going but normally when it gets



out of hand I reduce my voice so that their noise is amplified so that other students will hiss around to silence the others. Sometimes if you tell them to keep quiet, they may even ignore you because they enjoy it. So I reduce so that I don't communicate enough and I realise that they keep quiet and then I continue. I guess it depends on different strategies that are used by lecturers. The last sessions that I had I didn't have a problem. Of course I noticed that one of them had some noise level which was different from the other but then it was manageable. In other words you can't get rid of it completely.

LD.9 I imagine there is a group of student who always seat in front of course the front rows are normally left because people do not like the front rows. I don't know but there are just a few of them there. Sometimes when there was no microphone, I would tell them to come to seat in front so I make sure I don't start teaching until they move to the front because I don't want to shout. Normally many of them would be obedient but there is a few who remain and I will not bother with them. Some sleep in class and they make a joke about it and what can we do about it.

LD. 10 Umm, generally I am not sure if they plan to seat like that but generally I find that a boy and girl come to class at the same time- they seem like boy and girl friend and they hug and kiss each other in class. So I think it's more with how they interact from outside the class, these friendships that they form outside the class. So as they come in they maintain the same seating arrangements. Some of them come together and they seat together but I don't want to make a claim that that pattern is planned. It may be that they are friends outside and when they come inside they maintain these associations.

LD. 11 I have given my reasons, I think that they (clusters) might be there and you could find probably a group of four white students or black students are seating together. To me it seemed there were friends already or they have formed those friendships outside. I am not sure how they handle it, whether they could leave out their friends as they come to class and seat with somebody you are not used to. I have already seen a group of Chinese ladies -3 of them seating together and it was almost like a pattern you

would always see them seated together. Of course, those patterns stand out but of course you don't to be concerned about that because my business is to teach.

LD.12 From my experience I have not had any verbal attack on me be it verbally or in other ways. But you may notice, I am not sure whether it is because of race or something, when you start a class the first time you meet them, there is a lot of attention. I don't think I am good at reading facial expressions but maybe some of the students seem to be dismissing you and are just giving you time. They are watching how you will perform but normally in the first ten minutes the class is settled, they sort of want to see how you are going to handle the lecture. I have not had a racial attack but I have just had one of my black colleagues who was complaining that sometimes when he get to the class the equipment has been disconnected, the projector and what, what what, when he is teaching. He is a black guy, when he is teaching the projector is disconnected. He told me that when he is teaching the projector is disconnected but I have not experienced it . There are some lecture halls where we go with our laptops and physically connect them to the projector which is right in the middle of where the students are seating and the power cable is near the student so the student will just put it off and off course, they can always say that it was a mistake. What can you do? Students are watching to see how you are reacting. You just put it on and keep pretend you are happy and keep on.

LD 13 I think it was, students do many things. Some of them come and seat in front and they sleep so that you can see they are sleeping and the others are seeing they are sleeping. I think it depends on how you handle it. Sometimes, I just ignore it, pretending I have not seen it. What do you do, because if you go to the department they expect you to have taught the class and they want to know how you handled the situation. You should have taught or you will have a make up or something. Of course, I have also noticed [race indicated] students who are cheeky or they show disdain in class.

LD. 14 Maybe not. What I do before I go and meet them is that obviously you have to be apprehensive; there is a history of racial discrimination against blacks. Of course black students have attitudes, white students have attitudes. Black students from South Africa have attitudes towards other blacks from other countries. Immediately as you introduce yourself I have the sense that I am being evaluated in the first few

minutes not only by the whites but by the black South Africans as well. They probably want to see how this guy is going to eeh. But these are feelings that I get. I act on them by doing my best and manage the class in the first ten minutes.

LD. 15 I have not been able to see that thus why I am giving my personal experience, the sense I get when I am in class. And I see as if I am being evaluated in the first few minutes. But normally it's about holding your ground. In class you notice people talk and chat so long as they do not interrupt the class. I notice they are students who when you are teaching they nod and I don't know whether they are playing with your mind. I presume they are understanding and you go along. From white students and from Black students I think that sort of evaluation is there. It's like you are being assessed. If you make mistakes then you notice they laugh. It's like they are waiting for mistakes and they laugh. When you are teaching a practical subject sometimes technology misbehaves so you don't need to be worried about that, you need to make a joke out of it so you continue.

LD. 16 Sometimes what I have noticed is that when they come to class, after introducing yourself the first three or four minutes when you are giving the objectives of the lecture, I have noticed that some of these students [PAS] go out. My presumption is that they know the stuff. Like the first year IS course we teach some of the students especially from the privileged backgrounds. These people I read had exposure to computers so as you teach, some whites [PAS] walkout after introduction of the course. My presumption is that they have done the stuff because they come from a privileged background. Give the background of Apartheid so most of the black [PDS] students will remain because they want listen and hear. Sometimes you find that a big chunk of the white population may not be very attentive but they are in class. But that is not to say all because some good students who participate in the class are whites. Especially female white students are quite attentive and that I can say and you will find that they want to encourage or something... Of course I have also noticed black students who are cheeky or they show disdain or they sleep in class, openly, somebody sleeping on the desk like this (*he demonstrates*). Those are the things that are open and I have come across. In some instances when I notice this is open challenge sometimes I feel well I am a human being: If you want to sleep and you think I am going to react, I don't react so the person sleeps and they might make

themselves stupid before the class. I don't say anything. Sometimes you would see the friends nagging on her to wake up and she works up and it continues.

LD. 17 First of all they are not too many so I didn't notice anything out of them.

LD. 18 I feel that one of the critical factors that need to be considered. I think that students are free to come and consult with me or some of my colleagues like Salah. I mean I am relatively younger than most of the lecturers in the department. I think I am able to understand what they are going through because I probably went through the same not too long ago. Most of the after consultations that I am getting are from the black and for some of them I was a source of admiration when they come and they chat to me. They probably think that it is possible to make it if you are black when they find out that you are doing a PhD and you are black and you sound capable of doing whatever you are doing. So I think age is becoming a factor. This I can relate to many things even to how they relate in class. I tend to ignore sometimes when for instance somebody is on the phone (texting) because I don't think that it affects their learning which is unlike how we were taught in the olden days. If you are not fully attentive the lecture can stop the class and rebuke you or punish you. But personally I think that some of those things are not affecting the student's learning. Somebody is listening to you but they are busy on their phone chatting or they are sharing with their low tones in class but not interrupting the class. I am only able to handle that because of my age. But sometimes if you were from college long ago you may not be able to understand why those things are important because nowadays students do interact a lot and they don't just rely on the teacher. Even in my own reading, I am relying less and less on what is in the library but different sources of information. I don't have to rely on one text book or one opinion always. I think that is the kind of thing that is coming up in the classrooms and to interrupt them is to stop the learning. You are not the only source of knowledge even if you are delivering at that time.

LD.19 For me in our field, I don't think it [age] may be a big issue because we are in a field which is very dynamic. The technology we teach them is easier and by the time they are in third year it will be a different technology. To me it's all about how the lecturer

is able to adapt to student situations as they move along their learning phases. Seniority may become critical at senior levels, when a Professor is dealing with a Masters or Honours student there is respect that you have more knowledge but at lower level I think they are trying just to get to grips with what it is that they are doing at university and I think they need more people who understand their situation, what they are going through and how to relate that information in a relevant manner. I notice that at the end of the semester many of them still do not know. They rely a lot on queries but the information is already there on Vula. Sometimes you may get angry and say why are they asking all this when the information is already documented. They still consult with the online administrator and other colleagues. Sometimes the administrative staff will be cross because all the information is there. So you need to understand that and some of them come and cry so you can't make it worse by telling them to go on Vula but rather take the time and explain. To me seniority at certain levels might not matter. Especially in our field they have to understand how the technology works and how they can learn so there is a lot of pressures from different angles.

LD.20 No here I have in mind something like social networks like Facebook. If you look at Facebook as a phenomenon itself first of all it was developed by a university students and it was meant for university students so. These fellows just recognised that the way students learn in university has changed over the years. So it a totally different from the 90s and the current generation is a totally different generation and the lecturers are disconnected with them and even the youngest lecturers went to school probably in the 1990s and they were taught even by the older generation of lecturers. So the younger lecturers in the twenties or thirties are now sort of in the transition. Coming from an older way of teaching and of being taught but dealing with a generation that is more about networking-they love sharing, that is the point. So I think that the boss issue is not very important and thus why I am discounting the issue of seniority. It's not about somebody boss and someone a subordinate, it's almost like all of you are equals when you are sharing ideas or knowledge and I think that is where we should head. For instance the younger lecturers may have an advantage because they are not too steeped in to the old way of doing things and they are able to connect to the younger students because most of the students are 18-20.

**LD.21** No I haven't experienced it . In fact to reflect on my teaching, I was teaching about 280 students at the University of Nairobi, the very fact that I went there and I looked younger than the rest, everyone wants to talk to you even after class. They are confident even coming to you so that is important but when you go to departmental meeting you hear senior staff complaining that for some reason that class is problematic. The same with some of my colleagues who were even younger than me. The younger lecturers tend not to mind even socialising with them but senior lecturers try to maintain some distance. Of course with socialising I mean that interacting but in a way that does not break the ethical or moral code

**LD.22** I am not sure whether it is a resource issue. At UCT we are lumping the students in classes. You have a lecturer handling 400 or 600 students in one session and you expect interaction with in 45 minutes. I think interaction is almost zero. Academics have always said that you need to break classes into smaller sessions because if you look at the blog on our [department] site, students complain that they don't hear the lecturers. Even when they teach using microphone, there is a lot of echo and noise so they are not really interacting. As you are talking they are hearing but you are not interacting. So the issue of having smaller classes is really important.

The other thing is that the structure of the course is that some are overloaded, some of the lectures that are taught in the IS are all text books or subjects on their own and you are expected to cover that in a short space of time. So there must be a balance in terms of how much content should be created for each of the classes so that so that the lecturer does not feel the pressure to deliver within that specified period of time. The lecturer feels the pressure because the basis upon which the students will be examined is based I think to a larger extent on recall. What can you recall from what you have read – these are multiple choice questions. You cannot go about guessing, it has to be the correct answer. So you have to recall the lectures. In other words you have to teach lecture details in the class or they have to do it. So there is an overload in the curriculum and students have complained also that they are overworked because of too many things that get taught. So we have to explore also how to use technology, at least provide other channels to students where they can get the same information. Like

podcasting you may be aware that it is happening, so make it available. But again podcasting is one way it's not sharing. You are just delivering your lecture and putting it on the web so there is still a limit in terms of what technology can do. I think we need to explore how to enhance interaction using technology. Probably engage tutors more because I think there is a lot of potential in UCT for tutors to be engaged. But tutors are paid peanuts so most of them do not want to go an extra mile to help students. But if they are engaged and they are paid well then some of the limitations that arise in the large classes can actually be handled in the tutorials so that tutors do not go to the lab to move around only looking for people with problems but they can even handle theoretical issues that are raised in class but that were not tackled by the lecturers in the class. So far they have not done so because they do not have the motivation. The way tutors are remunerated at UCT is very bad compared with CPUT or even the University of Nairobi where I come from its higher than UCT which is totally unacceptable

## Lecturer E

- LE.1. It's hard to say because I teach a range of students. My experience is not limited to first years. I teach first years, second years, third years and post graduates. First years are the nicest to teach because they come in unbiased (*laughs*). By second year, they are already cynical and they have their preferences for lecturers and so on but the first year classes are very eager and they all come to lectures. We have a problem in our department with lecture attendance but not at first year level. At first year they come to lectures and they engage with you. I enjoy first year classes a lot.
- LE.2 Aaah, probably 350+, I think between 350 and 360.
- LE.3 Well, you mean why those who interact with the lecturer do so?
- LE.4 Its hard to tell, I think part of it is cultural- the culture of the school that they come from where they are encouraged to speak out as opposed to a to a culture that we still

have in our schools where you seat quiet and listen to the teacher, you do as you are told, you don't question, you don't engage- a culture where you have to be respectful to the older people and people feel shy in a big lecture raising their hands. So it's hard to tell. Maybe it's also generational as this generation of students is different to how we were when we were young as students. They a lot more scared and timid to ask questions in a big lecture even if we did come from that culture of asking questions. So it's a difficult question whether or not students interact with lecturers. I think it has to do with various issues and varies from situation to situation. It could be your approach as a lecture, I find that most students prefer to talk to me outside of class than in the lecture. I don't tutor first years but I find even with the second years they don't speak to me during or after the lecture but they come to my office to speak privately or if they see me one university avenue they will speak to me privately. So it depends on the lecture and the individual. They know I have an open door policy, when I am on campus and anybody can come and knock and I will see them, they don't need an appointment. So I guess it's because that- they know I am accessible.

- LE. 5. No there is very little interaction. With 350 students, it's basically a lecture with about 20% interaction. There is very little interaction, there is no space really in a big group for interaction
- LE. 6 Very little, I don't think gender has anything to do with it. I think personality probably plays a bigger role and how you are perceived by your students. Some lecturers give that space for interaction and represent that image of being more fun maybe, which is difficult to do and still maintain and do what you still need to do in the classroom. So I don't think gender really plays a big role. I don't think gender or even race is a factor. I think its just personality of the lecturer. So whether or not students interact in the classroom has more to do with the environment the lecturer creates in the classroom as opposed to specific characteristics about like gender, age or race.
- LE. 7 May be it depends on the discipline because some disciplines are still perceived as male dominated. So if you are male lecturer in a traditionally male dominated domain



like science, subconsciously students might place more value on their input than a female lecturer because you don't have a lot of women in that field. It's not considered to be a female dominated field. So that way they [students] might subconsciously believe that male lecturers are more credible and give them more value, even if they don't agree to it. It might be a subconscious thing because of the patriarchal nature of society. I don't know what disciplines you were looking at, but if you have a male science lecturer as opposed to a female science lecturer, maybe that could be an example of a situation where students might subconsciously perceive him to be credible. Yeah, maybe.

LE.8 Definitely, a couple of things. Even though seating is not prescribed, like it is at primary school or high school where you can be seating at the same desk because your books are there. Even though seating is not prescribed, students tend to seat in the same spaces every week or every time you have a session which is interesting. If you get to know the students you know where you can find them in the room because for some reasons, they choose to seat in more or less the same spaces or the same quadrooms of the room. Obvious things that I have gotten already. But secondly they seat in established social networks. Students seat with their friends, they seat in their particular peer groups so that they also chat in between, pass notes in between. So they seat in the same place. I think at UCT, there is still a fair amount of racial segregation, you of find black students are often clumped together and white students are clumped together. So you still find that. They are mixed in terms of gender but I can't think of anything else. They seat at the same places, with their friends and often its split by race.

LE.9 It's difficult because it's in big classes. In the small groups its different like the second years and third years where we have 15 students in the class. At first you force the interaction but after a while the inter-racial interaction becomes very natural and students that would never have interacted with certain types of people before, are actually friends at the end of one or two semesters. It also depends on the size of the class I think. In smaller groups where students are almost forced to interact it becomes more natural I think

LE. 10 I think it could also depend on the discipline. If the course is structured in such a way that students have to interact, do things in pairs then that starts to change and if the lecturer is conscious of it and when it's time to put people in groups or pairs deliberately mixes people up, so I think it depends on that I guess

LE. 11 Really, thus not surprising but I think that should be subconsciously, I don't even think that students realise they are doing it and I don't think we as students realise that is happening. But if you look at the structure of South African society, the place where the white male is head, the place of dominance is one they have always had in society so it's not surprising that it is replicated in the university settings. (This is) because for host of reasons, we might debate whether they are valid or not. But for a host of reasons the majority of knowledge production in South Africa at South Africa universities is still by white males, maybe it's linked to that. There is a number of reasons why Blacks academics are not publishing as much, thus not the subject of this interview. Maybe it's not surprising that there are perceived as being credible sources of academic knowledge if they are the one publishing. I am sure it should be a subconscious thing. You could ask the students and say which professor do you like Professor this or that and why? Don't say white males so that they don't realise what you are trying to do (*laughs*). The white males in South Africa has always been (at the top) even though they feel disadvantaged at the moment, they really not. They are still occupying high positions in business and universities

LE. 12 They feel they are becoming like an extinct species with black economic empowerment and affirmative action. The best position to be at the moment is to be a black woman and white women are still doing very well but white men feel oppressed. So many of them are living the country

LE.13 Definitely race does. It's hard for me to put a finger on it but I feel it as a young black woman. Maybe its age and race combined I don't know, but as a young black woman I feel I have to fight harder to win students' respect than as a white male. I feel that there is a lot of assumed authority that comes with looking a certain way and that when you are young and black, you have to fight twice as hard to prove that you are competent and that you are capable of doing your job. Simple things I have observed that when a white male colleague walks into a class and stands and looks at them they

immediately quieten down. But (when) you are you are younger they will be a bit more chatter and you have to say excuse me can you settle down (*laughs*). There is not that assumed authority. You don't have that in-built and it has to do with the structure of our society.

But definitely it's harder to teach larger groups and smaller groups sometimes. For example they automatically call you by your first name when you are young whereas with older people maybe even the racial element not, they automatically use the title doctor, professor, you know. Where hardly any of my students call me Dr X, most of them without me saying they can, use my first name because I am young. They are more informal with you I think and you have to fight hard to maintain those boundaries between eh, you want to be friendly but you have to have that boundary. I am your teacher not your pal, I am not your friend. It's much harder to have those boundaries, and students try to push those boundaries sometimes, although I must say I have never been invited on Facebook by students (*laughs*) although I had one invite from a Masters student and I gladly accepted because we were more colleagues as a Masters student and it's not much lecturer student. We were more colleagues working on the same kind of project.

LE. 14 No, students have no idea. It matters possibly within relationships among your peers but in terms of relationships with students they don't know. They don't know the difference between a doctor and a professor or the difference between a lecturer and a senior lecturer, they don't know most of them do not have an idea so they don't notice really. The only difference might be the Head of Department, everybody else who has power.

LE. 15 What do I mean? (*laughs*)

LE. 16 I take issue with the term coloured, I mean. It's an apartheid construct. I am politically black so I identify myself as black. I am not white therefore I am black. I think that to self identify as coloured it comes with a host of problems. It's an apartheid construction designed to further divide the black population. If my parents were my parents were really white so I could not say that I am really mixed race, my parents and my grandparents were born in the continent so for all

**LE.17** Thus a very difficult question, it's a loaded question if you could be specific may be. I am not saying interaction is not good but one has to realise that a more interactive classroom it's not necessarily a classroom where there is more learning taking place and thus the difficulty. Interaction is good yes, my small classes are interactive but my lectures are hardly ever. There is hardly time for asking questions because there is simply no time. When you have 45 minutes and you need to impart a set of skills or knowledge which then needs to be applied later in an essay or exam you simply have no time for interactions. I don't think I can really answer your question because interactivity can be defined in so many different ways. There is a whole continuum of what you could be asking by interactivity.

Secondly, I would say it depends on the discipline and what you are teaching, the content that you are teaching, does it allow for interactivity. It also depends on the personality of the lecturer, which I think plays a huge role. They [scholars] always talk about the lecturer versus student but the problem with that model is that it doesn't allow for any kind of human agency or personal side of things. It doesn't take into account the individuality or the individual personality of the people concerned, lecturer student interaction from one context to another. They could be vastly different because of culture, race but also because of personality. Our personalities are all different, you know.

**LE.18** I would say one of the things universities should do is to create a larger awareness among the faculties of the importance of good teaching skills. There is a huge focus on research "publish or perish" you do research and you are writing [...] There is a whole focus on research and they talk about how to publish and how to write books but nobody tells you how to be a good teacher. It's just assumed that if you have a PhD or a Masters, you going to be a good teacher. It's frightening, I have a PhD but I don't feel equipped at all to be a good teacher. It's now my second year on campus and now I am beginning to learn what it is to be a good teacher. But I think I was really bad in my first year because everybody just assumes that you can stand in front of the class and you could teach it. So basically what I am suggesting is that we need to take a few steps further back before we can start talking about interactivity in the classroom whether it's good or its bad, what should a university do. The university

needs to realise and inform its faculty that teaching is a valued skill. I mean we don't get credit for teaching and for convening courses. We don't get credit for pracs, [practicals] we just get those contact hours and that means that the university does not value teaching. They just value research because that is where they get money. They get money for everything we publish. The point I am making is that there are broader structural issues that govern interaction. In some way I know you are interested in the micro practices but I also think that you should also look at it within the broader context of what is and what isn't supported at university.

## **INTERVIEW WITH PREVIOUSLY DISADVANTAGED STUDENT (PDS) X**

This interview was conducted with previously disadvantaged student from the ADP class who used Facebook for were required to use Facebook. This student expressed limited high school experience with computers (see DS 11). The interview was audio recorded and later transcribed.

DS X1 I use Facebook for keeping in touch friends. The first time I used it was when we were given a task in IS to open an account. That is when I was introduced to Facebook.

DSX2 My Facebook profile has what I am studying, my name, my school where I come from

DSX3 Well, I don't exchange a lot of stuff. I use it simply for checking what they are doing and it does not go beyond that. We exchange wall posts like pictures

**DSX4** I have never pretended to be someone else on Facebook but I know of people who post pictures of celebrities

DSX4 My Facebook friend's age are 18-20 on average. It's not a matter of preference but it's just something without me even noticing. Most of these friends are people I went to high school with and those whom I know from long back. It's not like I make a choice to befriend people of a certain age.

**DSX5** Yes age matters [in my choice of friends] I think in a way it does because age determines the level of experience and determines how you relate to people

**DSX6**-I have about 17 friends and I would say 35% are females and 65% are males.

Again it is not a matter of preference. I am more inclined to talk to guys and it's hard for me to relate to female friends. I don't usually associate with female guys. Most of my friends are middle class but my closest ones are lower class. There is a few that are lower class like me.

**DSX7** I came from a lower class background but I attended a middle class school.

**DSX8**-I attended a middle class school because my mother worked hard to ensure that I get the best education and that is how I got into a middle class school. From where I come from it is one of the top schools and it is a Model C school. Model C schools are the good schools to my knowledge. It used to be a private school but was converted to a government school.

**DSX 8** Socio-economic status does not matter in my choice of friends. I am not a materialistic person. It boils down to character. It is personality that I value. I have few friends whose status is above mine yet they treat me the same way that they like to be treated.

**DSX9** All [of my friends] are black. I have none from the other races. Race does not matter in my choice of friends. I would accept if they send me an invitation to be their friend [on Facebook]

**DSX10** I have few classmates as Facebook friends but I don't have any tutors or mentors as friends on Facebook.

**DSX11** No I only started using computers when I arrived in university. There were computers in my former school but they were just sitting in the lab and we weren't using them and I don't know why. There were 120 computers and the school had

slightly over 500 students. We didn't use these computers neither did we have access to the internet.

**DSX12** The first issue [with regards accepting a lecturer as a Facebook friend] I want to ask you is when you add your lecturer as a friend does it mean you are friends or does it open a channel of communication for you? If I get an invite from my lecturer so that we could be able to communicate to reduce the effect of distance maybe when I have problems to reduce them, or in order to discuss something online then I would accept. But if there is any other reason beyond that I wouldn't because I am not used to having a close relationship with lecturers. What exists is some sort of a professional relationship, they come to class, they teach, I listen and they go and it's over.

**DSX13** I have a few friends that I went with to high school whom I attend classes with

**DSX14** I am a member of The Mthatha group on Facebook—it's the city where I come from. I am part of that group and the IS group. It's basically chatting about how Mthatha is, the new developments and what we do when we go home. What happened was I received an invitation from a friend to join the group. When I joined I found out that most of the people in the group are people whom I know. I think it might be open to any to join.

**DSX15** My personal interests Laughing, sport, and anything that brings me joy.

**DSX16** Well, I don't have interests that necessitated my use of Facebook but after joining as a requirement from the IS department I found a few friends whom I had lost contact with that is what promoted me (not to join) but stay on Facebook

**DSX17** It [my face to face interactions] involves talking to the person and it is more real because there is body language and you can visualise and you can see their facial expressions rather than on Facebook where you only see words that you read. Face-to-face [is warmer] because often the body language communicates the message more than the text.

DSX18 My Facebook use has impacted in-class interactions with the lecturer this way: What I have observed is that if someone posted a message to the lecturer the next day she revisits what the message was about and comes to the class and explains what the message was about and she explains to the whole class. It means then that if she is able to discuss issues with one person and then comes back and explains to the class it means the whole class benefits because we might not all have the time to address all those questions on Facebook but because one of us has taken the initiative to discuss the issue on Facebook we actually benefit.

It does not impact on my [personal] relationship with the lecturer. It does not change my relationship with her. My relationship with her is a professional, they come in they teach, I listen and they go. If I have a question I prefer asking my friends, my fellow students or my tutor. I never really ask questions in class. (*Note the culture of silence*).

I don't interact with my tutors or mentors on Facebook. It's face to face when we have a session thus when I ask questions. My use of Facebook has nothing to do with how I interact with my tutor.

DSX19 It [his Facebook use] has not had a substantial impact [on his in-class interactions with peers] though. Knowing that someone has sent you a request to be a friend it communicates a message to you that that person is actually considering being your friend or considers you as a friend. It impacts through initiating the friendship

DSX20 Vula [is different from Facebook because it ] is for academic purposes and thus where we get our course information, grading for academics. Facebook is more of a social network where you chat to people. It's more of conversations but Vula is strictly academic.

DSX21 I don't think I would be affected [if something academic is added on to Facebook]. I am not really in Facebook so I would not really know. I only come to Facebook three times a week.



DSX21..It [face impact on peer relations] is more of initiating a personal relationship/ friendship because some people who are here I haven't really spent a lot of time with them. So Facebook just adds to that initiation.

DSX22 I don't really think that Facebook has a substantial effect on breaking boundaries. I don't think does that many lecturers on Facebook. There are also quite a number of students who, possibly not in the commerce faculty, but equally who are not on Facebook and they do not really find it academically useful. If not all students are on Facebook it cannot have an overall effect on students, particularly if there are some who do not use Facebook.

DSX23 If Facebook is to be educationally useful we have to know how many students are on Facebook. Besides for that to be useful there is need for both the learner and the teacher have to online at the same time but that is not going to happen in the real world because people have things to do. By the time you are online all of your friends or your lecturers are offline and then you will leave a message. Similarly by the time she is online you are offline.

**DSX 24** No it can't [impact the pace of learning].

**DSX25** No I don't think [it impacts learning content decisions] so because there is no restriction on what you get. You get what you want to get on Facebook and you leave what you don't want. Choices are on the individual. It only serves the purpose of establishing links and you chat to your friends in university and in different parts of the world. In that it is useful in establishing links and relations.

DSX26 The problem could be one of addiction partly due to poor time management and partly because people they just enjoy being on Facebook to the extent that they shut out everything that they have to do

DSX27 Facebook is more of an [empowering] experience because you get to know how people behave online, the sort of things that are posted online, and you get to develop your views with regards that. It helps you to establish boundaries with regards what is

correct and what is not. That is on the general empowerment part but on the academic empowerment it doesn't.

DSX28.I define myself as a Xhosa traditionalist. Someone who loves talking and laughing and it's all about fun and I believe in fun. I have firm Xhosa values

They [values] might [permeate Facebook] because a few of the friends that I have on Facebook I might actually share the same values. So yes you might see them coming up because that is the way we relate. I can give an example of manhood. We have the same ideas of what it means to be a man. It [manhood] means being independent, being able to take care of yourself and your family and being able to work for yourself. It means being responsible and taking responsibility.

University of Cape Town

## APPENDIX B

### Discussion Board Posts (DBPs)

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**Topic: How did you survive PGDIP?** ■■■

DBP.1

And by survive I don't mean whether you got into honours, passed or whatever, I mean how did you emerge from the experience alive?!

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**Topic: Why are there so few IS majors in 1st year?** ■■■

2. Are there any reasons why first year students do not want to major in Information Systems?

3 They all want to be cliché and choose the CA option haha

4. i think they know what they in for that's why they choosing the easy route! then again it's only as easy as the amount of work you put into it take it from 3rd year information systems student? gets pretty busy

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**Topic: Brain Drain** ■■■

5 Hey guys. I was in IS Honours '04 and I shifted across to London after graduation, and I know a fair few others from my class who did the same. I know the government's putting a lot of effort into trying to convince graduates to stick around, and I'm wondering if it's having any effect. Any current students around who have thoughts on the issue?

6 . i'm a 3rd year IS student and i'm also thinking about just skipping the country thou it may see somewhat wrong but man the country is slowly going too shit and i really wanting to make something of myself and find it hard to believe it's going to happen here!

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**Topic: where is the IS help section?** ■■■

7 've been wonder about would there be someone able to help me when help is needed since so many people are off track and taking up space and have nothing really to talk about of value or substance! oh ok maybe it's just that time of the year where we all still chilled and not yet stress and crapping rocks! so where the IS questions?

8. As mentioned in lectures several people are available, depends exactly what [what] you require help on. [staff member 1 and office number], [staff member 2 and office number] [staff member 3 and office number]

9. OK makes sense. However what is the status on the DFAQ section ?

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**Topic: What has been your experience with using Facebook in this IS course?**<sup>132</sup>\*\*\*

10. The experience of using Facebook could be both exciting and a challenge. what's your experience in this IS course?\*\*\*

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**Topic: Literature review.....**

11. Does anyone know what's going on there?

12. Use the "Lost in Information System - Need help?" group to ask your questions if you are lost.

13. will do. thank you

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**Topic: Any humanities students out there ?**

14. are we supposed to be here ?

15. hey ya i guess (guess) we ought to be here. i'm a humanities student

16. Hi Theron, my topic for the lit review falls under chapter 5, which is the chapter we have started this week. does that mean that my review is due next week, during the vac, or for the first week of next term?

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**Topic: Changing of Weekly timetables**

17. Would it be possible to release an updated week outline as the one on Vula is out of date. I need this to work into my work schedule please. Has everything moved out a week ? If we miss a tut that is not an evaluation session can we still qualify for DP ?

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**Topic: Is Facebook a mere social networking site or a platform for academic exploration?\*\*\***

18. Does Facebook enrich the learning experiences of IS learners or is just a meeting place for old time friends? what is in that could enhance or research and learning experience? Which applications can we manipulate to maximise our learning processes and skills? i guess the education potential of this tool is vast and growing but how we can harness this vast potential needs some careful thought. What do you think?

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**Topic: What has your experience of the MCQ tests been like? Do you think that they were fair? & why?**

19. I will have my say there. The lectures were so boring. I didn't go to them and I am not prepared to study a whole chapter just for a 5min test. Half of the questions were out of

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<sup>132</sup> The topics and posts with three stars are the researcher's posts. This was part of the ethnographic stance of this study that involved direct participation on Facebook.

the syllabus, and even too hard for the tutors. Vula itself had many problems like one week it just crushed the whole time and other times you got given 8 options for a MCQ (multiple choice quiz).[...]. And the MCQs were just another problem with IS. No offence to anyone but yeah the quizzes sucked.

20. I think it is a very good concept and definitely something for other courses to think about using. However The chapter getting tested is sometimes a bit vague. What about a notice at the login screen stating the chapter being tested. The marking system is great as a instant mark is given. Overall very good

21. IS in general was poorly run. The mc quizzes are a good concept however even after attending all of the arduous and boring lectures I had to guess most questions. They were very vague and the textbook is too long to bother for just a 5 minute test. Lecturers put no emphasis on what is important instead they rumbled on and it is impossible to remember everything they said. The quizzes were also a waste of valuable lab time, trying to learn ms office in 2 sessions was difficult, and watching lecturers who know what they themselves are doing didnt help.

22. I found the quizzes [quizzes] very helpful for the test and forced us to keep up to date with the work. A lot of the questions were more general knowledge than actually from the chapters but this a way to learn i guess

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**Topic: Confused about IS topic for literature review due monday**

23. I am so confused as to what to do for my Literature review topic for monday, its not a question I just have 7 words which came with no instructions. the topic is Business, economy, market, profit, finance cost and value. I just wanted to know if I am just supposed read around these words and if i must relate them to something because it seems rather abstract.

24. [Student name] I'm sorry I can't help you, but Heather Martin can help you. So just try sending her an e-mail and she will reply you and all your problems will be solved.

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25. I kinda share the same problem. I also thought we were to get into groups doing Literature reviews...? What did you find out?

26. Hi guys literature review: you need to read on the work on that subject/topic you have been given....read the textbook, academic papers, journals etc in the library or internet as long its is credible work. Write what you have found in your own words as well as your understanding in class and reference it properly (see the APA system). hope this helps. cheers

27. Hey, How long must our literature review be?

28 for the literature length, read your course outline

29. Are All of the topics due on Monday? At the end of the page where the list of topics appear it says "Topics pre-fixed with by 11 {11.1-11.7} must be handed in by the 6 September 2008." My topic is 11.2. Does this mean that mine is not due Monday but on the 6 September???

30. Each topic assigned to a student is to be handed in a week after that chapter has been covered. If you are assigned topic 11.2, then you hand in a week after chapter 11 has been covered in class. cheers

31. Where do we find part 2 of the literature review questions?

32.oh is it, my literature review is 9.5 but i did it coz i thot it was due on the 2nd week, is there a possibility that i can reverse it back coz i didnt [didn't] do much research, was in a hurry and i couldnt understand the topic coz we havnt done it in class yet.

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**Topic: VOTTING**

33 VOTE STUDENTS (BX, CY, DZ) COMMERCE STUDENTS COUNCIL.WE ARE WILLING TO LET SMOOTH RUNNING OF THE INFORMATION SYSTEM DEPARTMENT FLOW TO OTHER DEPARTMENTS TOO.AS WELL AS THE I.S. DEPARTMENTS INOVATIVENESS.VOTING ON VULA STARTING WEDNESDAY.

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**Topic: Analysis and visualization in Excel - support group**

34. For any of those interested in making better use of Excel in analysis and visualization of data, for argument development, please feel free to apply to the new group "Excel Blackbelts". Free advice for those with questions.

<http://www.Facebook.com/group.php?gid=24905758438>

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**Topic: Reese-Miller Scholarship 2009**

35. The Telluride Association Reese-Miller Scholarship is an opportunity for a post-graduate Masters or PhD student, in any field, to study at the University of Michigan in the United States for one year, with all expenses paid. NB students must be registered at UCT in 2009/2010 to be eligible to apply. The scholarship includes tuition, airfare, health insurance, books, a living stipend and room and board at the Telluride House. The Telluride House is a community of about 25 students guided by the principles of self-governance, intellectual inquiry, and public service, and the Reese Miller scholar will be expected to be an active participant in this community. Applications for the 2009/2010 scholarship will be available online from 19 October, and must be received by IAPO by early January (exact date to be confirmed). If you are interested, please attend the following information session: Date: 16 October 2008 Time: 13h00 Venue: Meeting Room, IAPO Office 3 & 4 Lovers' Walk (lower campus, opposite the School of Dance) Links: Reese Miller Scholarship: [http://www.tellurideassociation.org/programs/university\\_students/us\\_awards.html#reesemich](http://www.tellurideassociation.org/programs/university_students/us_awards.html#reesemich) Telluride Association: Telluride House at the University of Michigan: University of Michigan: Contact: \* [Contact person provided]: Reese Miller Scholar from Michigan currently studying at UCT 082-310-7957, \* (full name): Exchanges Officer, IAPO, 021-650-2822, penny.vanzyl@uct.ac.za

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### **Topic: Lost in Information System lectures? - Do you need help? ■■**

**36.** Is there anyone who is still lost with any IS related classes - the theory or Excel? or even hand in procedures of the tasks? which topic do you need clarity on and how can we make it easy for you to grasp the materials?

**37.** its the theory material.. i'm still not clear on what i should know or shouldn't know... like some of the things that came on the 5min quiz the other day, i had read prior and thought that they were irrelevant, like the question about the geramn company...

**38.**Hi Lorna, the question simply wanted you to know whether you are aware of the best ERP companies available. That would mean you did not have thorough understanding of what ERP is all about,how it originated and where the best software can be found. Enterprise Resource Planning are network enabled business tools. ERP marks the current generation of resource planning and is a central system, whichreplaces "islands of information" with a single, packaged software solution that integrates all traditional enterprise management functions i.e. finance, human resources management, project management, data management, warehouse management, customer relationship management, supplier relationship management, e-business and the internet function. ERP systems use database technology and a single interface to control the all-encompassing information related to a company's business. SAP is the largest European software enterprise and the third largest in the world, with headquarters in Walldorf, Germany. the best ERP is found here. You can also get further information on this page with regard to ERP from South Africa researchers <http://www.dbsa.org/Research/Documents/An%20Investigation%20into%20the%20Implementation%20of%20Enterprise.pdf>

So understanding each section in the book is important....do not read to pass, read to understand.....any more clarity for other sections?

**39.** Hi, I dont feel learn enough in tutorials, cause being only one tutor , not really able to help answer questions. For example in task 2 I didnt actually know what to do in tutorial when they were suppose to help us use formulas. could we have another day for extra tutorial not compulsory.

**40.** Hi [student name given], It would be difficult to arrange for another class but will see what we can come up with. However, in case you have a problem, dont hesitate to make an appointment with your Excel lecturer or me. If there is a section you are not ok with, ask your lecturer in the next class to repeat it. By the way, which part did you not understand?....calculating a markup price?, absolute addressing? if statements?....it would be wise to know your weak area so we can discuss it even here in the forum. cheers

**41.** Good news!!!! If there are many of you who need help in Excel tutorials, i will be happy to arrange it...so ask your friends if they need help and let them discuss those problems here...in this forum.

**42.** Theron, i registered for IS about two weks (weeks) after semester began, so im a bit behind with excel and some of the theory. will there be extra tutorials available?

**43.** [student name], which course did you register for: INF1002F or INF1002H? it could help to know which level i should be dealing with. However, as i said, the more of you there, i will be able to organise the extra lessons. take care [student name]

**44.** PLEASE can we have an extra tutorial in the week – definately (definitely) need more time to learn the formulas required for tasks because there just isn't enough time to ask questions [in lectures]!

**45.** will organise it as soon as there are more of you. currently there are only six student requesting for it out of 700+ students.

**46.** yes i am so lost in IS im not enjoying it at all because I do not understand what is happeneing (happening)

**47.** please may we have extra tutorials, because I AM SEEING FIRE in information systems...

**48.** Theron i really really need help with excell (Excel) are there any extra classes i can take or can i attend 2 tuts or something ? and i'm not entirely sure what is required for the literature review - what are meant to do for it ? what is it exactly ?

**49.** be specific [student name]...its the only way i can help you. WHAT are you lost in? which chapter, which concept, etc?...it makes it easier for me to help.

**50.** Your study guide explains what is expected of you from a literature review. check page 11-13. Your goal is to review/ evaluate/analyse previous and current literature on the topic you have been given. You need to do some research work or investigative work on the topic. discuss the consulted work in order to understand and investigate your topic more. To explain better, a literature review discusses published information in a particular subject area, and sometimes information in a particular subject area within a certain time period. A literature review can be just a simple summary of the sources, but it usually has an organizational pattern and combines both summary and synthesis. A summary is a recap of the important information of the source. And depending on the situation, the literature review may evaluate the sources and advise the reader on the most pertinent or relevant. You do a literature review through books, journal articles, newspapers, conference proceedings etc....start with the library...its a good place to begin...and its better to use recent readings. Hope this helps.

**51.** The majority of you asking when the literature reviews are due. The due date is dependent on the chapter that you are covering in class. For example, if you are covering chapter 2 in class, and you have been assigned topic 5. Then your hand in date will be a week after you have finished chapter five in class. If you are covering chapter 3 in class and you have been assigned topic 2, then you should hand in your review by that week of chapter 3. not clear?.....regards

**52.** Hey Theron, a advised I am using Facebook. All I need to know now is whether or not it is compulsory to have diagrams for the lit review?

**53.** The diagrams are not compulsory...it all depends on what you have gathered on your work. However, a picture explains better -sometimes....its all up to you. Cheers



**54.** Note that if you were given a topic ranging from chapter 1 to 3....you should preparing to submit your work by Friday next week...that means, your literature review topic should be in by Friday 14th - next week.....use this weekend to study...cheers.

**55.** i'm sorry but what study guide are u referring to ? and how would i go about submitting my lit review once done ?

**56.** Hi! I'm fine with the practical part of IS... My problem is with the theory, I still don't know whats happening. i read the first two chapters and went to lectures every day and I still haven't figured out or made of the material.

**57.** hi Theron, i am in desperate need in understanding and grasping the info system theory please help

**58.** i am not getting excel. for example the task 2. every time i tried to copy the formulas i didnt get the desired results. i am not understandind (understanding) the if function well, and i dont think i performed well in task two at all none of my formulas made sense and when i tried to practise it still was not working out. the quizz as well was tough, are we ment to read the information in our text books? i was taken aback because not most of the stuff we do in lectures was related to the quizz,or was it just me?

**59.** [student name], which topic in those 2 chapters are you not ok with?, come and see me in my office and we can discuss it further. Lets start with the first topic: Data, Information and knowledge. Data is usually numbers, codes, lists that has no meaning unless transcribed. Information entails an understanding of the relations between data, it generally does not provide a foundation for why the data is what it is, nor an indication as to how the data is likely to change over time. Information has a tendency to be relatively static in time and linear in nature. Information is a relationship between data and, quite simply, is what it is, with great dependence on context for its meaning and with little implication for the future. Note however that a collection of data is not information!!!, the data must be processed/transformed to provide meaning....then it becomes information. When you are able to make a pattern amidst the data and information, the pattern has the potential to represent knowledge. It only becomes knowledge, however, when one is able to realize and understand the patterns and their implications. This example uses a bank savings account to show how data, information, knowledge, and wisdom relate to principal, interest rate, and interest. Data: The numbers 100 or 5%, completely out of context, are just pieces of data. Interest, principal, and interest rate, out of context, are not much more than data as each has multiple meanings which are context dependent. Information: If I establish a bank savings account as the basis for context, then interest, principal, and interest rate become meaningful in that context with specific interpretations. Therefore, Principal is the amount of money, R100, in the savings account. Interest rate, 5%, is the factor used by the bank to compute interest on the principal. Knowledge: If I put R100 in my savings account, and the bank pays 5% interest yearly, then at the end of one year the bank will compute the interest of R5 and add it to my principal and I will have R105 in the bank. This pattern represents knowledge, which, when I understand it, allows me to understand how the pattern will evolve over time and the results it will produce. In understanding the pattern, I know, and what I know is knowledge. If I deposit more money in my account, I will earn more interest, while if I withdraw money from my account, I will earn less interest. Now you must go and do research of your own on this topic to enable you to understand the concepts better. I will try to go over the other topics if i have the time

**60.** [Student name], Which aspect of the work?

**61.** Hi [student name], calm down my dear, lets start with Excel. In short, an If Statement is used in Excel to do certain actions only if something is true. For example, you might want to print out the message "We are losing money" if total sales for the quarter are below some amount. Otherwise, you'd just want to print out "We're making money!" The IF function lets you do these kinds of value based decisions. The IF function needs to have some sort of comparison to operate properly. A very common type of comparison is greater/less than (>/<). These math symbols can be used to form logical expressions like "A2 < 40000", which in English means "Cell A2 is less than 40000". Now that logical expression can be either true or false and the IF function lets you do something for each result. In this little example we will be making our IF function print out something our boss might say. The correct format to use for the IF function is this: IF(logical\_test, value\_if\_false, value\_if\_true) Let's clarify all this with a spreadsheet example. So, start a new spreadsheet and do the following: Click inside cell A1 and enter the number 6 Press the return/Enter key on your keyboard Widen the B column of your spreadsheet. Make it nice and big. Click inside cell B1 Click inside the formula bar Enter the following formula: =IF(A1 > 5, "Greater than Five", "Less than Five") To see the result, Press the return/enter key on your keyboard which other formula is giving you a rproblem....be specific just as you were with regard to the if statement. About the quiz, read and understand your textbook....if in doubt ask, ask, and ask....for example, dont wait until the quiz, what sections are you confused about right now int eh chapter you just completed - chapter3?

**62.** Hi [student name] study guide is the course outline we provided for you. Its on vula. You should read it thoroughly. The hand in procedure for the literature is as follows: You send a copy to Turnitin.com for plagiarism check and you also send a copy to me via email. Cheers.

**63.** Halo Everyone. I have managed to secure a hot seat session for you. You can now have an extra class on Mondays, Wednesday and Saturday at 09h00 to 12h00 in one of the comlabs. The venue (comlab A, B,C) has not been confirmed but i will tell you by end of today. This is the time to COME WITH ALL YOUR QUERIES regarding Excel!!!!!! dont go there as if you are going to a lecture, go there to ask specific areas that you need clarity....its the only way to make the best of the sessions. Regards.

**64.** hi Theron just to double check that im on the right path, if my assigned topic is 6.6 then do i hand in my lit review at the end of the the following week after we have gone through ch. 6 in class?

**65.** That's correct [student name]....in the mean time while you wait, you can do some research on the topic.

**66.** Hi Theron where can i find my marks for the tasks such as task 1, taks 2 ? the only thing in my gradebook on vula are my quiz scores.

**67.** hie Theron well im like really lost on the thoery part of the lectures so if we can have the topics put up on vula so that we know wats going on. secondly i have not yet been allocated a literature review topic.pliz help. student numbr is [student registration number] THANX

**68.** Hi [student name] I am still processing your marks for task 1, they will be up in due course. take care.

**69.** Halo [student name] the topics are already up on vula. You have been assigned topic 10.4. submission is a week after completion of chapter 10. Which theory part of the lectures are you lost in?

**70** hi Theron, I'd also like to participate in the extra excel tut... And about the theory, its not that i have a paritcular (particular) topic that i am uncomfortable with. It's just that i don't know which topics we are supposed to be doing... Like how in high school we had a syllabus, whats it for IS?

**71.** Halo [student name], Excel extra classes are available for any who needs them, every Monday, Wednesday and Saturdays at 09h00 - 12h00 in the comlab A. With regards to the course content/topics you should be covering, check page 4 of your studyguide/course content material on vula. Enjoy your weekend and take care.

**72.** hi [student name], i've been assigned topic 11.2 , when am i suppose to hand it in? and i still don't get what i'm actually supposed to do.

**73.** ok, so i have been assigned topic 1.4! Apparently it was due friday, i know this now only-wat now??

**74.** Hey Theron, I found out today that I was assigned with chapter 3.2 and from what i've been reading the due date was last week friday.. I also have never written a literative essay and I'm not really aware of what is expected of us to do.. Is there anyway I can hand it in this thursday? And is there a brief explanation of waht a literative essay is?

**75.** [student name] Eugene, u submit the topic after completion of chapter 11 in class with your lecturer. If you are still lost with what you should be doing, i recomend you read other previous posts - i have explained it. cheers

**76.** it means you are not reading posts on vula regualry. All those assigned chapter 1 to 3 topics must hand in by March 20th....that is this Thursayd. NO EXCUSE will be entertained because the message has been up for the past two weeks.

**77.** I would advise oyu to read the previous posts to find out what is expected of you in a literature survey. also read your study material/content material....It is too bad if you found out that you have been signed topic 3.2 last week. The topics have been up more than two wekkes ago....you may submit by 20th March at 12h00. Please read the posts on vula regualry to keep uo to date.

**78.** Dear All Your mid-semester test will take place on Saturday 5 April 2008. A list of your scheduled times will be put up on the noticeboard as well as on Vula by 4pm today.

**79.** Hi [Theron], I have been assigned topic 2.6 for the literature review but there is one slight problem. I cannot find any information about the importance of hardware standards and I have been looking for couple of days now.. There is also another difficulty I am experiencing, I have no idea how am I supposed to write 6 pages on a topic that cover about half of A5 page.. Please help me, my time is running out.. Thank you

80. Hi [student name], you need to read articles on related topic...not just the textbook. There is so much work covered on this subject in computer science and IS related journals/books. The primary considerations for any hardware configuration are: ease of connectivity to a given network; ease of connectivity to external systems and organizations; consistent performance of all integrated components in our networked environment ;successful in-house experience with the chosen product and configuration; serviceability by external hardware repair providers ; maximum period of machine functionality etc. You need to discuss issues such as processor , memory, operating system, etc. For the basic understanding, read the article on this URL: [http://www.embedded.com/columns/esdeic/26100525?\\_requestid=175502](http://www.embedded.com/columns/esdeic/26100525?_requestid=175502)

81.Hi Theron, In 1 of your previous posts u mentioned that chapters 1-3 for the lit review are due by march 20. If I'm doing chapter 4.2, is it due this week or next week. If this week, then must I submit it by thurs or fri?

82. Pls Help !! :( I am very confused as to how to send the copy of my essay to [www.turnitin.com](http://www.turnitin.com). I dont know even where to begin. I have been assigned a class in turnitin by another subject which has given my login details, but im not sure if i should use that because its not for IS. Once again, Theron, pls help me :( I am in the process of emailing you the other copy of my essay, as per the instructions in the hand in procedures on Vula...

83. chapter 4 will be due when you return from the break. For now, enjoy yourself.

84. you can come into my office and we sort it out if turnitin is giving you trouble. However, the turnitin class id and password are on vula.

85 Hi Theron I'm a tad bit confused.. If chapter 4 needs only to be handed in in the first week of lectures.. Does that mean chapter 5 needs only to be handed in in the second after we go back? I apologise for the question, it seems to be rather mundane. Also, will we be tested on theory or practical for our test? If so, which chapters? Thanks a lot :)

86 [Student name], chapter is to be handed in this week and yes chapter 5 next week (see vula). the test covers all chapters done in class so far plus excel.

87. HIE I DONT HAVE MY TEST VENUE AND TIME. STUDENT NUMBER IS [student number given) [Reply to CandyReport](#)

88.your problem should have been resolved now. check [course administrator]

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89 hi [student name] Hope you had a joyous Easter break. By the way when did you say we could meet for the brief Facebok interview? I am looking forward to meeting with you. Thanks \*\*\*

90. Hie [student name] I am inviting your participation in my research on students use of Facebook, focusing particularly how lecturers support/help students in their learning process. i would be grateful if i could meet with you for a brief interview of about 20 mins on this subject. If possible, you can let me know when we can meet at a time convenient to you  
Thanks \*\*\*\*

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**91.** CHAPTER 4 IS DUE ON THE 4TH APRIL 2008 AT 12H00.  
CHAPTER 5 IS DUE ON THE 10TH APRIL 2008 AT 12H00  
CHAPTER 6 IS DUE ON THE 17TH APRIL 2008 AT 12H00

**92.** Hi Theron I'm sure lots of people have asked this already so sorry if it's a dumb question but if i have topic 9.3 is my lit review due in week 10 of lectures? Just a little confused as topic four is apparently due this week (which is week 6) so does that mean mine is only due in week 11? Thanks

**93** Hi [student name], your due date should be early May but still dependent on how far the lectures have been covered in class. prepare for the 08th of May.

**94.** HI Theron, My literature review topic 8.1, what is strategy. 1stly, it feels like such a broad topic, i don't know HOW to start. and are there any notices as to when it is due?

**95.** I would also like to request extra tutorial classes and excel classes pls

**Topic: Lost in Information System lectures? - Do you need help?**

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**96.** will arrange them for this term

**97** hi Theron, i just realised i do not have MS Access on my laptop is there a way i could possibly get it? i was unable to attend Friday's lectures because I had other lectures in 1 and 3 respectively,i am a bit concerned because i have not been doing that well in my excel tasks so i was hoping on maximising with the Ms Access ones but i am now behind, i am really worried, is tomorrows tut a practise one or is it a task that will be submitted

**98.** Hi [student's name], no need to] panic, why dont you pop in my office between 08h00 to 10h00. I can assist you then.

**99.** hi Theron, i will be there at 9...thank u

**100.** Hi Theron I'm a little confused about the topics for the literature review - when I go onto my Vula account, it tells me that I'm supposed to do chapter 9.7, but according to a friend of mine, her vula account has me down for chapter 12.6. I checked some of the emails on the INF1006 tab, and it seems that a lot of people have been having this problem with their chapter being changed - how can I check for certain which review I am doing? And why are there 2 different sets of assignments circulating on Vula? Thanks

**101.** Hi, would like to know where to get the study guide which you refer to for literature review? thanks

**102** hey Theron...i just wanted to know what time our lit review for tmoro is due for ? all the other topics have times allocated but mine doesnt..thankz..ps (my topic is 6.5)

**103.**

My topic for the lit review is 9.7 what date exactly is that due?

**104** Hi Theron, I wrote the make-up test that was held on the Wednesday after the test, but my mark still isn't published. I had a legitimate excuse (I gave [staff member] a copy of my

medical certificate), so I don't see why my mark isn't up yet. Also, in my Gradebook, there are a lot of blank spaces between my Quiz marks. Is that normal or does it mean that I've missed some assessments? (I've handed everything in, which is why I'm confused!) Thanks

**105** Hi [student's name] according to vula, you are up for topic 9.7. stick to it.

**106.** for mark related issues, go to room [room number provided]

**107.**Check vula, chapter nine is due on the 08th May..

**108** check vula.....it was there since January....INF[course code],2008 Resources / Administration/INF[course code] -outline 2008.docx

**109.** Honestly, I have no idea how to do the literature review...I have topic 9.7, cyberthreats and there is hardly any information on that topic in itself. Please could someone help me out. I was hoping to get it done this weekend but now because the research is scarce I cannot do it. The review outline in the IS handbook is also very very vague. Theron, please help [...]

**110.** Seems like im not the only one...where can i find the brief for the lit review.im unsure about the length or the structure of the assignment

**111.** Hi Theron, Could you please inform me on when the exact due date for the lit review on chapter 12 is due. I looked on vula but all the dates except for ch 12 were present. I'd also like to request some guidance on my topic 12.6 (ergonomics) and where I could possibly find relevant info. Thank you.

**112.**The due date for those writing their literature review on Chapter 12 is 22nd May, 2008. Working with your computer can be productive, rewarding and a lot of fun. Unfortunately, prolonged postures, coupled with high levels of concentration and the occasional frustration of things going less than perfectly, can lead to physical problems. Basic understanding in the way you "interface" with your computer can help prevent common health-related problems. A little knowledge of the principles of how people should interact safely and efficiently with machines and their work environment, can save a lot of discomfort and maximize both productivity and enjoyment. this is ergonomics.....goodluck.

**113.** hi [student] Do we have to present our website on frontpage in the lab or can we use internet browser to present it?

**114.** sorry, replied to late....goodluck with exam.

**115.** Goodluck to you too Theron

**116.** Hey Theron. Yes I am totally lost. In the theory mostly.Like i don't know how to use the theory taught about what an information system is and apply that to answer questions about the Uct IS system. On the practical side I dont have a problem. But i dont really know what inputs and components are.

**117.** Hi Theron I have been looking for the lecture slides on vula for the theory but they are not being uploaded. There is week 1 and 2 but from then on i cannot find the theory slides. The practical slides are up to date but not the theory. [student name]

118 Hi Theron Could I please set up a meeting with you tomorrow (11 sept 2008) or friday (12 sept 2008)?? I really need help with queries and advanced queries. I emailed you as well. Thank you [student name and number ]

119 Hi Theron Could I please set up a meeting with you either tomorrow (11 Sept 2008) or fri (12 Sept 2008). I really need help with queries and advanced queries. Thank you! Kelly Slater (SLTKEL001).<sup>133</sup>

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120 Hi, on Wednesday morning I went to the hotseat at 9 and there was not one tutor there. I waited 40 minutes and still no one came

121 Could any email me the summery notes at studentname@yahoo.com if they have them.

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<sup>133</sup> This is a repetition of a prior question

## I54 Postings on Facebook Wall

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**1.** Anyone looking for a great night out. Then come and watch RipCord perform next Wednesday (20th May) at Mercury Live. Don't miss it! [www.ripcord.co.za](http://www.ripcord.co.za)

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**2.** Dear Friends and Colleagues

I know that I have promised on many occasions that I would send “my 3 minutes of fame through” to you... Summary: I was asked by Summit TV to provide an inspiring storey that would motivate young entrepreneurs to start business. Please bear in mind that the questions were handed to me literally as the camera crew arrived so I did not have much preparation... To be honest I HAVE NEVER BEEN SO NERVOUS IN MY LIFE!! Please don't laugh The link to the video was emailed to me yesterday!

[http://multimedia.johncom.co.za/view\\_video.php?viewkey=d7d808f1d14a6e9c8280](http://multimedia.johncom.co.za/view_video.php?viewkey=d7d808f1d14a6e9c8280)

If you require student jobs in top industries: Banking, IT, Audio visual go to <http://www.leegra.co.za/> and join today. In addition to creating opportunities for students, WE PAY ON TIME!

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**3.** Hi! I would like to be of service to you. I and my team have recently launched a new site that offers Essay writing service. If you need College papers, Term papers, Admission essay, Project essays, etc. We can help you with any writing need. Visit us now at: <http://www.customessayplus.com/>

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**4.** Ola! Check Out The Cape Town 15 Day Weather Forecast on the Gospel Ramah Youth Page's Discusion Board. Cool, Cool Staff. Cape Town Weather Just Got Predictable! Only On GRC Youth Page. Spread The Word.

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**5.** Hi, Theron, my Literature review topic is so broad and im not sure which angle to tackle it from... could you please give me some advice. My topic is 11.7. (P.S. - Should i go with whats in the text book or expand, i.e. go international.)

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**6.** Hie ,Theron please may you help me, Under my grade book my task 3 mark shows a 0% yet other task marks are not showing and it seems like i am the only one with my Task 3 mark. Please may you check it out for me. Thank you.

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**7.** Take it from a 3rd year: There is not an Information Systems Department in the whole of Africa that has a prayer of matching UCT for academic quality!!!!!!



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**8.** Theron, we need help with 4.2 c) How do we calculate the number of Order Items sold per product.

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**9.** Whats going on for the IS literature review?

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**10.** Hahaha! Yay yay! Shortest career in IS ever! goodbye! free yourself!!!

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**11.** does anyone know what time the computer literacy test is tomorrow?

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**12.** whats heppezai????

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**13.** you guys are acting like such turkeys

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**14.** Romes inn.... Welocome Mr. Gustav 2 the world of 2morow...

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**15.** If its admin, Its not me baby, its Lorna Martin.

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**16.** by this i wish to confirm my membership of the "IS@UCT" group. Take note...[name given]

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**17.** I called up Prof [name and surname given] once enquiring about doing his PHP course.. and then i relocated to Durban.. what's on offer via correspondence?

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**18.** YES i can leave this group now wohoooooooooooo

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**19.** hey Theron when can we expect to get our grades ?

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**20.** hey Theron, the mark in our grade book now, is that the final course mark???

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**21.** if people didnt get 45 %, which is pretty much everyone i know, do we have to do the whole course over again next semester even our overall mark is over 50%?

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**22.** hey there Theron, just wanna check, will tuesday's exam have negative marking?  
Thanks

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**23.** Hi Theron. According to the INF1002F outline that we were given, there will be a long question/written case study in our exam. Can you confirm that this is true or will there be only mcq's as it was in the last big test? thank You

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**24.** Hi all,  
Someone just email me a link to a summary of the INF1002F textbook. Check it out here:  
<http://www.mediafire.com/?slln39gzycp>  
Regards, Nick

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**25.** If you want to donate to xenophobia victims: Clothes, blankets and non-perishable items. These can be donated via SHAWCO's offices on Level 5 of the Steve Biko Building or on the Health Sciences Campus from 8.30am onwards on Monday (and then in office hours) or at the Rondebosh United Church, Belmont Road, Rondebosch, over the weekend.  
UPDATE:  
Desperately in need of nappies, sanitary towels, baby powder, vaseline, toiletries and canned food.

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**26.** Dark Video is a gripping new novel about four University of Cape Town students. Kopano residence (Belsen), the res swimming pool, Rondebosch, etc all feature extensively. Read the first chapter online @ [www.darkvideo.co.za](http://www.darkvideo.co.za). The author studied IT at UCT. Catch me in it. Available at all leading bookstores in South Africa and online via [Kalahari.net](http://Kalahari.net) and [atvelocity.co.za](http://atvelocity.co.za)

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**27.** The theory exam will be exact like your first test. However the prac exam is different. this was said in your class on wednesday. the structure was given. concerning your task 3, you will have to contact [staff member] office [office number]

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**28.** Hi Theron. i missed task 3 n gave in a d0ct0rs certificate does that mean the 0% is calculated in my course grade? because it brings all my other marks down? Please let me know. Thanx

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**29.** Hi Theron, just wondering what our exam will be like? Will it be in the style of multiple choice questions similar to the sort of questions we have had every week in our quizzes? Thank you, [student name given]

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**30.** EXAMS. This is to wish all our INF1002F students goodluck in their exams. We wish you well.  
All the best :)

---

**31.** Yap [student name], friday hot seat is alumni labs from 08h00 to 11h00.

---

**32.** Hi Theron! Are we going to have a hot seat on Friday?? I think that's going to be very helpful for all of us.

---

**33.** Hiya INF[course code]  
Please have your say in the discussion above called 'What has your experience of the MCQ tests been like? Do you think that they were fair? & why?' :-)

---

**34.** the announcement is already on vula Wendy, that is as far as i can go....there are some students who have gone and done some research on posisble funcitonalties of an ecoommerce website (thats what Khaba Moya is all about). You should be able to think in that direction ...do some research on some e-commerce websites. Intergrate relevant functionalities in your own work. thats it...on how to do that, use the guide provided...goodluck.

---

**35.** Jonathan is quite correct, as long as you have a customer form that captures their info and a submit button. Check pg52-53 of the guide i gave you ...it could help on

---

how to save results in a database....as well as get results from a database....but i dont expect all functionalities to work....

---

**36.** You cant get the Database connection fully fucntional to test. This is because we need to have the site published and Database on ASP enabled server. So i think the latter option would be sufficient. The search thing you can get working without the connection to the Database. I used a program called Zoom Search engine

---

**37.** Hi Theron... Just a little confused. Are we supposed to be able to link our site to an actual database? As well as in the search function? Or is it sufficient to just have a page to show that we did think of it? Thank you

---

**38.** Hi Theron

Please will you put up an annoucement on vula explaining what preparation we need to do for Task 5. Your lecture was not very clear about this.

---

**39.** Natasha, Ronald.....the aspects you are referring to is the theory and i will communicate such info to your lecturers. Phumla: create an ID to distinguish which order the customer has made. for example, ID123 is a primary key in the Order Table. But customer X has made 3 Orders (Order1, Order2, Order3) under ID123.

---

**40.** Theron! how do you enter many product Ids under 1 customer?

---

**41.** UM quizz 7 was on Chapter 11 . I remember the older women lecturer covering it. Theron, if you guys say it will be on something please stick to it as we dont have just your subject to do and have alot of other things on our minds. We dont have time to relearn the whole syllabus for a ten mark MCQ each week ! But thanks for sticking to the outline. It has helped me organise my life :)

---

**42.** The quiz wasnt on any of the other chapters either.i know because i hav studied the other chapters.

---

---

**43. Computer Literacy Test:**

Hi guys, concerning the computer literacy test: please speak to [staff member]. He has further info about that. He is in office [office number given] I am sure he can provide you with the necessary information  
cheers

---

**44.** [Student name], let me find that out....but does it really matter what chapter the quiz was on....if you have already done chapter 1 to 10, you should still be familiar with them....not to read only that specific chapter for the quiz....especially as you prepare for your exam which is not far way.

---

**45.** Hi [student name], actually this is a formal thing for INF1002F/H. We use Facebook to attend to student queries whenever we can....[student name] i will need to see your database .....maybe tomorrow around nine?

---

**46.** Hi Theron, what was quiz 7 on? because in the outline it says chapter 11 and access, yet there was no access? and half of the questions didnt come from chapter 11 i know because i studied for it.i hav already gotten 0 for two quizzes and these marks do count..so pls let me kno? Oh and thanx so much for being up to date with the slides. its been a big help.

---

**47.** Is this a formal UCT thing or is it informal?  
[Report](#)

---

**48.** hi Theron. We have abit of a problem... we have a customer,order and sales table but have a problem when creating relationship, should we make a forth table that will link all of them?

---

**49.** thats the right thing to do [student name given]

---

**50.** will try to check for you guys....but task 4 is already given to you, even done in class.

---

**51.** shoul we add the customer number on the order table and the despatch

---

**52.** Theron, would it possible to put the tasks for excel and access that we have completed with solutions on vula in preparation for the exam?

---

**53.** Hi Theron. There is a message on vula about a quiz due for tomorrow. What is this quiz on?

---

**54.** Hi [student's name], you may send it to me at [Theron.Moyo@uct.ac.za](mailto:Theron.Moyo@uct.ac.za)

---

**55.** Hi Theron, my literay review ( chapter9) is due for the 8th of may. but turnitin does not have INF[course code given] as a option when i log in. i don't know what to do. my Student ID is [student registration number provided] thanks

---

**56.** what enterpreneiship (entrepreneurship) possibilities exists in IS....What is enterpreneship ..understand what the term means and identify potential areas in IS where such opportunities can exists.....this topic is linked to innovations and creativity in IS. good luck.

---

**57.** Hi [name given]. My lit review topic is entrepreneurship. could you possibly tell me something more specific that is wanted as this one is quite broad. Thanx

---

**58.** Hi [student name given]  
look in INF1002F,2008 Resources / Administration/INF1002F-outline 2008.docx  
....check under literature review...u had this guide for the past 4 months...in addition, check responses i gave to those who were asking similar quetsions, especially in the "lost in Information systems..." discussion board.

---

**59.** Hi Theron, could u please tell me where to get the study guide which explains how to go about doing the literature review?

---

**60.** [student name], you will need to provide other sources apart from the book....we need to know you did some research....broaden your horizon....Thando, its not possible to do that....all quiz must be written before the specified time - sorry;

---

Nicholas, the marks will be up soon once the markers have finished...marking is beyond me....Keenan, thats part of the work you should be doing, check pg246>.

---

**61.** Hi guys, couldnt reply to your queries....wasnt around for the past week ....hope all of you are fine. with regards to hot seats, contact office [office number] for details. course outline is on vula INF[course code] ,2008 Resources / Administration /INF1002F-outline 2008.docx

---

**62.** wasdasok time for a little update, remember i told you about the lovestick enlarger pills that mike and his brother have been taking from <http://www.wokig.com> that completly changed their lives, well at least made them into the talk of the town with all the girls around, not to mention 3 of my friends who actually dated them in the past few weeks and can't stop talking. well, heres an update, andrew heard about the pills and he too has been taking them, i am a witness and living proof that his thing is monster huge, yes and don't ask how i seen it, just take my word for it. all i can say is, go now and buy them if you want instant results that they guarentee on any guy who takes them 100 percent or all your money back i even ordered them for you know who. go now to <http://www.wokig.com>

---

**63:** Hi i just wanted to know which chapter in the text book covers my lit review topic "9.7. Cyberthreats (hacking, dos, social engineering, viruses, spyware etc)" thanks

---

**64.** Hey, how long does it take b4 we get our IS Lit Review marks back?? are you marking as they come in or do ou wait till they all in b4 you mark??

---

**65.** Helo Theron, For th reviews do we need to search for it even if we have enough information on the text book

---

**66.** hi Theron. id just like to know when and where and what time the hotseat for practicals is for the INF1002F course.

---

**67.** hi, where is this guide you refer to?

---

**68.** Information on literature review you need to read your guide, and also

---

---

Facebook's "Lost in Information Systems: Do you need help"

---

---

69. Hi Theron

Where do I find the instructions on what to do for the literature essay??

---

---

70. Hi Theron

I would like to know the minimum no. of pages required for the literature review coz max of six pages is toooo much

---

---

71. hi Theron

just wondering you said the new marks were going to be up today but mine is still out of 3,200.. how/where do i got to find out the correct mark?  
thanks, [student name]

---

---

72. Hi [student's name], i do not know of any other option unfortunately. However, you can try [staff member] - a staff member in the department...next to my office.

---

---

73. for all marks related problems, please contact [staff member] in her office

---

---

75. Hi Theron

How do I go about following up my Task 2 mark? I was given 0 for that task. I submitted it according to my tutors instructions and I definately did not get 0 for the task.

---

---

76. Thank you! I have one more query regarding access. My laptop does not have access installed and when I enquired at ICTS they informed me that due to Microsoft licensing they are unable to install it for students. Is there any other means of obtaining access which I am unaware of?

---

---

77. hi Theron what was Saturdays test out of?

---

---

78. Hi [student name], the marks should be officially out today and whatever you had obtained before wasnt the final mark. That mark still had to go under negative marking. The marks were only released today lunchtime on vula under the Admin folder.

---



---

**79. Hi Theron**

I would just like to have some clarity about the results of the i.s. test. The mark displayed under gradebook on vula is out of 3,200. I have asked if others have the same total but was informed that their tests are out of 80 which makes logical sense. Could you please inform me why this is the case and what my final result should look like. many thanks

---

**80. thanx Theron:-)**

---

**81. Thank you Theron!**

---

**82. [student name],** for extra info, look at this page [http://www.12manage.com/methods\\_bpr.html](http://www.12manage.com/methods_bpr.html)....its not credible but it is informative.

---

**83. Hi [student name]** BPR = Business Process Re-engineering: it is a systematic, disciplined improvement approach that critically examines, rethinks, and redesigns mission-delivery processes in order to achieve dramatic improvements in performance in areas important to both customers and stakeholders. Change Management defines activities involved in (1) defining and instilling new values, attitudes, norms, & behaviors within an organization that support new ways of doing work and overcome resistance to change; (2) building consensus among customers & stakeholders on specific changes designed to better meet their needs; and (3) planning, testing, & implementing all aspects of the transition from one organizational structure or business process to another. The two have a similar goals - achieve best/maximum output with minimum input. they want to maximize operations from one way or the other by critically analysing existing & alternative methods. advise: read on the topics & find correlation

---

**84. Hi [student name],** ICT = Information and Communication Technologies ....Simply put its all the hardware, software and communication technologies that tremendously improve operations and decrease prices for communication... you need to look up the related works.

---

**85. hi [name given]** . im supposed to do my lit review on "measuring effectiveness of ICT" in chapter 11.7 what exactly is ICT? thanks :-)

---

**86.** Hi guys, due to load shedding, we received the notification about the venue change late. We apologise but the problem was out of our control.

---

**87.** Hi Theron

I just want to check about the IS quizzes that we write on Tuesdays. How many should we have grades for by now? Our last one was not up and I don't want it to count against me later, as I have no mark for it. Thanks

---

**88.** Hi Theron

I have been wanting to come to the extra classes on EXCEL and on both Monday and Saturday, there were no classes taking place in COMLAB A. Are there still EXTRA EXCEL classes running? And if so, where? I really need help with Excel

---

**89.** Hi Theron I also did not see the IS announcement. I hope you realise that it was unrealistic for us to have seen the message an hour and 37 minutes before the new lecture. A simple notice on the door or board of my 6th period venue would have saved much of my time.

---

**90.** Hi Theron

I think it is very unfair for an announcement to have been made less than 2 hours before the the rescheduled lecture at 1pm today. Many of us did not read the announcement and sat in leslie at 2pm waiting for a lecture to take place. Surely an announcement could have been put up earlier in the week as i'm sure the load shedding times were known already. Would it be possible to redo today's lecture as many of us missed it and will be at an unfair disadvantage if you don't.

---

**91.** Hi [student name], you should have reported this problem much earlier. However, i have reassigned you topic. It is now topic 9.7: Cyberthreats (hacking, dos, social engineering, viruses, spyware etc).

---

**92.** Halo [student name]; yes, you should submit a plagiarism declaration attached to your hard copy or scanned and attached to the soft copy that you send to me (ofcourse a copy should be sent to turnitin.com)

---

**93.** [Student name], i have already responded to your query

---

---

**94.** Hi Theron

Do we need to submit a hardcopy of the plagiarism declaration signed, when we submit our lit reviews? Thanks

---

**95.** I have topic 9.9 for the lit review so therefore is due in week ten of lectures right, however, there isn't a topic for 9.8 or 9.9?

---

**96.** Hey Theron. im going on a hockey tour next week and im leaving on sat 5 april. my test is at 12 or 12 30 & i need to be at the airport at about 10 30 or 11. just wondering if i can write it at 8 30. also my lit review is due on the 10th and im away then, so just want to know what i can do about that. Thanx

---

**97.** many have asked of any past questions....unfortunately we do not give out such information. However, the test set up will be exactly like the quiz you write during your practical sessions.

---

**98.** [student name], i know. Quiz 3 has proven to be problematic. but we will notify you of the details as soon as possible.

---

**99.** Hi [student name], we had a big technical problem yesterday and thus the quiz could not be posted. It will be scheduled for another time next week. we will notify all of you through vula. thanks

---

**100.** Hi [Theron] , Are there any past papers available for the test on sat?

---

**101.** Quiz 3 ???

---

**102.** Hi [Theron], was told by tutor today that quiz will be available later today. Is it available now and if so where can I get the password?  
Thanks

---

**103.** [student name and another name], check vula INF1002F,2008 Resources / Literature review /Literature Review Due Date.docx

---

**104:** Hi guys,  
[student name and another student], you need to check vula . it provides all the solutions to your queries. Wendy, i have just put up the theory notes: INF[course code],2008 Resources / Lecture notes / Theory Lectures

---

**105.** HI [Theron] .If we have a topic from chapter 5 what day exactly is it due??

---

**106.** Thanks Theron. Will the lecture slides for chapters 4 and 5 be put up on vula?

---

**107.** Hi Theron.my topic is on 5.7 wat is that?

---

**108.** Hey,Do you know when the next chapters of the literature review assaignment must be handed in??

---

**109.** Hi [student name], sorry for the late reply. Your test covers all chapters done in class plus Excel.

---

**110.** Hi Theron My Task1 assignment has been returned with no mark...Unfortunatly (unfortunately) I didn't put my student number on the file name but it was in the actual document-Will I be penalised?

---

**111.** Theron, could you please give us a breakdown of the test, like what chapters from the textbook we need to have covered and the format of the test.

---

**112.** [student], you can bring it to me in my office 4.19.but that was supposed to be on the 20th and not after that. any submissions after that requires a penalty. cheers.

---

---

**113.** [student name], thanks for your concern. all lecturers have been advised to mail their slides to the course administrator who then puts them up. In addition, there are educational arguments surrounding the issue of putting notes up on vula before classes/lectures. However, we will follow the matter up as soon as possible. Thanks  
.

---

**114.** Hi [student name), You can use textbooks that are MS oriented.  
start with the library.

---

**115.** Hi Theron I don't know if my lit review is in or not! I don't think I used turnitin right? Where can we bring a hard copy to?

---

**116.** What exactly must we learn for the mid-semester test?

---

**117.** hi Theron, this is an information systems course and how information systems can make life easier for people so why is it that all my courses have their slides on vula BEFORE the class and us, who are doing an information systems course don't have our slides on even a week AFTER the lecture... I'm trying to figure out what sense that makes? everyone is complaining about how they can't follow lectures but how are we expected to follow lectures without something in front of us to look at or even to write on? this has become really ridiculous especially because we have a quiz every week on the work... I would just like to know if the slides are ever going to be posted on vula?

---

**118.** Hi Theron I have got topic 6.8 Guide on how to use MS-ACCESS for my lit review. Could you please give me and the others with this topic some guidance on how to approach it and where to find sources other than on the internet?

---

**119.** Dear All

On Tuesday the university experienced a power outage as well as network problems. The tutorial that was cancelled (18 March 2008) has been rescheduled for Tuesday 1 April 2008. Theron

---

**120.** Dear All. Your mid-semester test will take place on Saturday 5 April 2008. A list of your scheduled times will be put up on the notice board as well as on Vula by

---

4pm today. Salah.

---

**121.** Yane

---

**122.** Hi [student name] Fares, You study the same way you do for the other course. Attend lectures and practical classes. Use the "Lost in Information System - Need Help?" discussion group to ask any queries regarding the work. I normally discuss student problems there. Both theory and practical. You can also use Vula for posting your problem areas. We can then discuss them, otherwise, if you have a problem see me in my office.

---

**123.** Ay yo!! How are you supposed to study for I.S.!?

---

**124.** so the CSS layout and photoshop thing what do really need done?

---

**125.** Hmmm...ICTS wake up and give us DC!

---

**126.** To all web design students: Talented CSS layout designers with Photoshop experience wanted! Work at home and in your spare time to create website layouts for some very decent extra income.  
Contact Mike @ mpwronski@gmail.com or go to [www.xynex.co.za](http://www.xynex.co.za)

---

**127.** im just in a daze?! but the vula questions are for tuesday dude

---

**128** theres 6 Qs on IS on vula we gota complete 4 fri...

---

**129.** wat thing r u talkin bout?? :s

---

**130.** Wow, was this really necessary?

---

**131.** anyl started that thing 4 fri?

---

**132.** KJ izz zeeeeee bezzztttt :p

---

**133.** hello ppl of IS, iagree wit my friend vafa and plead wit all to hit the f1 button nw as a show thanks to kj, guntaag and shalome my friends and let the force be wit

---

---

your output systems

Report

---

**134.** Kopano Boys are in this room again again... You guys probably know the rest by now! Kopano Yeah!!!!!! Anyone know what da F1 button does again?

**135.**HAHAHA! guys dont you think this is a lil random! I think this is supposed to make IS cooler;)

**136.** i'm joining that plea for a little help...

**137.** please would someone ever so kindly tell me what the 5 components of IS are..

**139.** [students name] here- it seems that the uct I.S students NEED MORE THAN JUST A HELPING HAND i THINK SOMEONE SHOULD HELP THEM "V U L A!!! ALL THEIR CLOSED DOORS.WITH REGARDS TO Information systems that is-VALA.

**140.** I am so lost, wat do we do after we have joined this group [...]

**141.** ok i have joined now what?do i get a gold star?

**142.** Exe i dont kno d answers to these Task 1 questions..daya-yam!

**143.** gUYS...clearly the blonde streaks are coming out cos...i dony have a clue where comlab B is and have a tut ting there soon...sigh...

**144.** what is UCT student info system

**145.**why did we have to join this ?

**146.** "Just dye my hair blonde now" how do you book for your TUTS andDONT SY GO TO VULA cos i have and nothing is happening.....

**147.** somebody help me and tell me if i have joined the group or not?

---

---

**148.** Give me my 2 percent ;-)

---

**149.** wat was the other stuff we had 2 do? ^^

*I really wonder is* this what they expect from the elite of African students

---

**150.** Phew! Thats part of Task 1 complete. lol

---

**151.** Do the students from IS1002 who have to join this group need to check it for academic purposes??

---

**152.** Good luck with your thesis results part-time honours! I will be there (with the flu so beware!).[administrator]

---

**153.** Yeah and without a degree :-)

C u @ graduation [name given]

[administrator]

[Report](#)

---

**154.** If anyone has aspirations to do part-time honours... Hmmmm, don't. Rather just sit in front of your computer every night for two years, and squeeze your head as hard as you can. Don't stop, don't f-ing stop. You'll get the same experience for much cheaper



## Facebook Inbox Postings

1. hi Theron if i want how i make the form to assign customers (customers) which register to accounts, i hv (have) tried the form properties but it aint working!

2. hi Theron the maximum no. of pages for the review is 6. does this include a cover page because I have 7 pages if I include the cover page. regards

3. Theron we need help with 4.2 c) how do we calculate the number of Order Items sold per product.

4. In i/s when creating a query in access and you enter an iif (if) statement and are asked to enter the parameter value what are they reffering (referring) to? In your tables in access you want to create a column where you will be able to calculate the total using ciels (fields) in the same table ,how do you go about doing this? Lastly how does one in access calculate values in this total column i reffered (referring) to in the above question? Thank you very much Mr X

5. HOW DO YOU WRITE AN IF STATEMENT WHEN CREATING A QUERY IN ACCESS ?

6. firstly, give a name to the field that will display the result. secondly, write the if statement formulae which is as follows: IIF([the particular field] condition, "do this A", "do this B") For example: the field in which the result will be displayed can be called: show. and the field we need to check for is called age therefore: show: IIF([age]<20, "Teenager", "adult"). hope this helps.

7. thnx very much I hope I will be able to get a consultation tommorow (tomorrow)-friday-cheers

8. we have encounted (encountered) a problem with no 3. We are unable to include the record status in the query.

9. you can use an IIF statement as follows status: Iif ([Unit Price]>500,"Need Approval", "OK to Reorder")

10. do we put this under the criteria

11. Thank you for the last time but we are now unable to do the backlog orders. We get problems when it comes to the criteria.

12. Hi Theron. Please can you help me with the following queries i have for the INF1002F exam on tuesday: How many questions will there be and will it be split in half with questions involving Excel, Access and Front Page. Thanks, Matthew

13. no practical component

**14.** plz tell us what we must do. how it must be done ie. referencing, must it be typed ,how to hand in how to read the questions to be answered by each group?

**15.** Hi [name given], you must the Apa style of referencing, check the course outline provided to you on how to reference....if you still have a problem, ask me tomorrow in class but come with the course outline so i can show you. Concerning what to do, you must try to sort of summarises the topic provided by reading a range of articiles (articles), books and the internet. on how to hand in, you must submit a hard copy to [name given] or me as well as send it to turnitin.com for plagiarism check. cheers.

**16** Theron, could you kindly clarify one issue for me. i checked my grade book today and i saw two 0/60 under CLC. i assume that this refers to computer literacy tests, one of which i wrote earlier this and i failed it but the second one i missed. i am worried that my marks for the first one have not been captured. And could you tell me what CLC stands for?

**17.** For CLC queries contact [Staff member's name or another staff member] cheers

**18.** Hi Theron I am not sure if my name is already on a list or something to be excused from tommorows (tomorrow) exam for religious reasons, as i was excused for the last test. But if it isn't could you please add it. Many Thanks. [Student name and Surname] [Student registration number]

**19.** ok

**20.** Hey Theron, on grade book it says that i got 0% for task4. I know that I didn't get 0 for that task. I have DP nonetheless but the 0% implies that i didn't actually do the task... is there anyway you can check if a mistake was made when entering my mark?? because this could have an effect on my final mark... thank you so much  
[Student name and Surname] [Student registration number]

**21.** please contact [name of staff given]

**22** hi Theron. I handed my literature review qiute (quite) a while ago it was topic number 5.7 and i put it in to turn it in and emailed it to you but on my grade book on vula it said i have got 0 for it i was just wondering if you could help me find out what went wrong, my student number is [Student registration number] Thanks [student name]

**23.** will check into it.

**24.** Hi Theron, I'm currently studying INF1002F and submitted my literature review last term. It seems my marks have been finalised but my task 6 still shows 0%. Can you please explain to me why I have 0% for task 6. My Student number is WXXTEN001. Thank you for your time Theron

**25.** marks are still being rounded off. I am sure you might not have got that.....final marks will be up soon, otherwise see [staff member's name] in office 4.11.

**26.** dear Theron, i heard that formatting for excel is not going to be in the practical exam, like pie charts and so on is this correct? because we dont have to submit anything for the excel part? thanks [Student name]

27. no graphs, and yes no submitting anything in excel except (except) writing the answer on your exam paper.

28. Hi Theron. Did you get my message that i sent to your email about Quiz 4?  
[Student name and surname]

29. Hi, the questions regarding the graphs will not be marked. They will be eliminated from the quiz pool. Thanks.

30. None of my questions were about graphs! Please read my email and let me know asap.

31. [Student name given] i get a lot of emails more than 1000 from students, remembering who sent what is sometimes a task!....i will have to now ask the administrator for those questions that they uploaded....

32 .hi Theron, i didnt join the IS group at the beginning of the year; what is its exact name? i cant find it by seaching (searching) either. help! thanks,[student name]

33. Hi Theron. I have been assigned topic 12.5 for the IS literature review. I have tried to research it at the library and on the internet but cannot find any material. Is it possible to change topics? Or could you tell me what i should be looking for? Thanks. [Student name]

34 STUDENT NO. [provided] Topic "Personal and Professional Ethics"

35. not possible. unfortunately you will have to contact your lecturer who taight (taught) that chapter for further assistance

36. Do you perhaps know who is going to lecture next weeks theory, on chapter 12? Thanks.

37. [lecturer's name given]

38. Hey Theron. Once we have submitted the literature review on turnitin, which I have done, I see that we need to email the literature review to you. Is it possible to just hand in a hard copy?

39. a hard copy is fine

40. hey Theron the form that we are doing is it for the customers ? if so then should we exclude other things like ,despatch details

41. you can choose to do any form for ny table/query, its entirely up to you.

42. dear Theron, i do not know if i have to rewrite the literacy test. it has not been communicated properly to students and i dont understand what this test is for? if i fail it what happens? and i was not aware of the new test dates. i was told we were men't (meant) to have training before rewriting the test and this has not happened. because what is the point of rewriting the test if i have no new knowledge on the subject ... Im very confused please get back to me as soon as possible and let me know who i can talk to thank you so much  
[student name and surname]

43. Hi [student name given]. please speak to [staff name and surname given]. He has further info about that. He is in office [office number given] I am sure he can provide you with the necessary information. cheers

44. Hey. Im a 1st year business science student doing [IS course code given]. Ever since i started doing IS i fell in love with it. i just wanted to find more about information systems

45. Hey [student name given], you have made my day....are you majoring in it...cause that would make me so happy...there are so many opportunities in IS. So many options....System Analysist (analyst), Programmer, Developer, and so many more...you have an advantage of knowing two worlds (IT world and business)...which is quite great in the real world...i would advise you to reconsider majoring in it...you carrer (career) expands without you realising it....especially now in the digital world of IT!.....we could have a chat if you like.

46. Hi Theron! me and my group mates are encountering problems with creatring (creating) the tables. This is due to the fact that there are order forms without an order number. As a result we cannot enter data without primary keys. Your assistance will be gracefully accepted

47. Hi [student name given], you can create your own order numbers.

48. with what we have done so far can we attempt project 3.2

49. yaah u can.

50. Do we have to use formulas for Task 3, because I dont know how to use it.

51. Yah, were it is applicable. which part are you struglging (struggling) with?

52. My name is [Name and Surname given] I wrote on the wall to ask how we got notification if our essay had been handed in correctly and obviously i missed your reply. Please could you advies (advise) me as where to check. Another issue is that my marks for my tasks in Admin are worng (wrong) and after checking on Vula the tasks that have been submitted are not the ones i did in my tutorials. I do have the tasks i did in those tuts on my hard drive and can email them to you if you can help me sort this out. Regards [Student name]

53. just telll (tell) me what is your topic number and i will check if its in. for mark issues, contact [staff member's name] in her office.

54. My topic number was 2.5.Buying hardware for business systems and my student number is [number given] Should i go see [staff member name] in person or email her regarding my issues?

55 pls contact office [Office number given]

56. Theron, I went there 5 times last week and there was nobody in the office. Pls (please) can you tell me wen (when) is the right time?

57. i think you should come and see me tomorrow between 8 and 9 to sort this out.

**58.** Theron i went to see the gentleman in 4.11 he told me to print everything out and take it to him. My father gets back from Joburg tomorrow so will print it out then and take it to him tomorrow afternoon or early Friday morning. Thank you for the assistance

**59.** Hi Theron, i just read that we were supposed to send a plagiarism declaration to turnitin, I did not know and have not... what happens now?

**60.** you can still send it to me

**61.** Hey Theron, I have been trying but it don't wanna work. Is the hard copy not enough?

**62.** SORRY FOR LATE REPLY, BEEN OUT OF TOWN. HARD COPY IS FINE

**63.** Cool, thanks. Buy the way, how can I get hold of [staff member], I have written three e-mails and none of them got a reply. I have been up to her office, but she told me to write to her? ANy idea?

**64.**you will have to contac office [office number given]

**65.** Hi Theron, I recently looked at my marks for task one and I realised that I had failed it. I could not understand how because I know I had submitted my task. When I looked on vula under tests and assignments I saw that my task had been returned. I was unaware off that at that time and because at that time I was still learning how to use a computer I was unaware that I had to check that my task was properly sent. I ask that you assist me in solving my problem because I do not want this to affect my DP mark. Thank you. Yours sincerely [student name and surname given]

**66.** mark issues to be reported to office [office number given]

**67.** Hi Theron I have just completed my quiz 4 but have some questions about some of the solutions given. Who can i speak to about this? Please could you also reply to my other message concerning task 3. Thanks [student name and surname]

**68.** hey about the literature review should we write all the topics as one essay

**69.**this is INF [code of class given] If so, its best if you find a link between the topics and write it as one essays rather than disjoining them.

**70.** oh! I see but it going to be hard to do that one.

**71.** u can come and see me - i will help you

**72.** i just wanted to find out how the task results are calculated and which ones they are exactly..i got two zeros for two of them? i dont know, please explain to me how it works.. Also i did not receive the chapter summaries that most students received via Groupwise last week before the test. thank you

**73.** contact [staff member's name]

**74.** Hi Theron where can we see what we got wrong in Task2, and Task3. as far as i know, i knew my work for those two tasks and i would like to see where i went wrong, also for examination practical purposes. [student number given]

**75.** Hi [student name given], please contact [staff member] as she handles marks

**76.** Hey Theron This is [student name, surname and number given], and I would just like to find out about my I.S test mark because on my grade book, it said that the marks are calculated out of 3200 and I would just like to know my final mark after the negative marking has been calculated. Thanks [name given]

**77.** MARKS WILL BE OUT TODAY.

**78.** hey i had topic 4.5 for the IS1002F lit review and the instructions said we were to submit to turnitin, which i did and email one to you...i never printed anything to hand in a hard copy? an thus never signed a plagerism (plagiarism) dec (declaration), just handed it with mine an put my name on to say that i agreed with it all

**79.** ok

**80.** right...so i hope thats alright

**81.** Hi Theron. Sorry for reporting so late! I've only realised last night that I have a problem with attending my IS workshop on 8th April. I've booked for my learners licence last year during November and it happened to fall on the same day and time (1~2pm) as my IS workshop. Am I allowed to miss that workshop (I am aware it's a prac session and not a submission session) or are there any make up workshops I can attend to? I really don't want to miss the workshop! Or is it possible for me to attend an earlier workshop just for 8th April? Thank you. [student name]

**82.** you can report to the course administrator [name given], so that you do the morning sessions at 08h30

**83.** Thank you so much!!!! :D

**84.** u welcome

hi there Theron [...] just wanted to check what your email add was to send you the Lit Review?

**86.** Theron.Moyo@uct.ac.za

Hi Theron. This is [student name]. My Student number is [number given], and I checked on Vula but it said that my task 1 was returned. I also don't have marks for the quiz 1. I would also like to know when are the computer literacy lectures starting? Thanks [student name]

**88.** hi [student name] computer literacy course have not started and as soon as they are ready we will inform you. However, with regards to your marks, i recomend you check with the course administrator – (staff member)

**89.** Hi. I have a hockey tour this week and im leaving on sat, but my test is at 12, so i was wandering if i could write it at 8 30, so i can still write it this week. i've been to reception but they were closed both time. my student number is SMLGEN001. I also have the lit review due on the 10th which is while im away. just want to know what to do. thanx

**90.** yah - u can write it at 08h30. about your literature review you will have to submit it on the 10th otherwise you will be penalised 5%. this is because you have had these reviews for the past four weeks+. you should have made a plan in advance or start making a plan now to submit early before u go.

**91.** Hi. I have a hockey tour this week and im leaving on sat, but my test is at 12, so i was wandering if i could write it at 8 30, so i can still write it this week. i've been to reception but they were closed both time.my student number is SMLGEN001. I also have the lit review due on the 10th which is while im away. just want to know what to do. thanx

**92.** Dear Theron Moyo.

As a practising member of the [Location given] Seventh-Day Adventist Church I request to be exempt from any activities and or exams between Friday sunset and Saturday sunset as this is my Sabbath. An official letter from my pastor, Ps. [name of full name of pastor and contact details given] may be prduced if requested. I therefore ask that my INF1002F Test on Saturday the 5th of April be rescheduled at a time of your convenience. Your cooperation is appreciated [name and surname] [Student Number given and course given]

**93.**a make up test is scheduled wednesday 09th April at 10h00 in Comlab [lab number given]  
Take care

**94.** Thank you for the information and quick response. greatly appreciated [student name given]

**95.** u welcome & goodluck.

**96.** Do we have a quiz 4 2day?

**97.** u were supposed to but we had a problem in the morning due to technical errors. the quiz would be up from 14h00 to 20h00 in the evening

**98.** hie i have not been allocated venue and time for the saturday test due maybe to late registration but it was all sorted yesterday. my name is [student name and surname] [student number] THANK U

**99** your time & venue is being sorted out by admin – [staff member full name given]

**100.** Im one of the students in the year course. Would you please put up excel notes for weeks 4 & 5 up on vula before the end of tomorrow

**101.** will follow it up. cheers

**102.** Halo [student name], without your student number, how do we know its you?.....its better to take the matter up with me in my office.

**103.** I'm terribly sorry I tried rectifying it on the due date but I could not submit it twice or edit it. I will come to your office on Monday if that's ok...

**104.** That's fine.

**105**

Thank you very much!

**106.** Hi Miss Moyo

Is the Lit Review, topic 4, due for tomorrow? Please let me know as soon as possible. Thank you

**107.** due when you return from the break.

**108.** Hi Theron. My tut was in 1st period today but the systems were down so we could not do task 3 or the quiz. Will it be postponed for another day? I don't want to get zero for the tut!

**109.** it has been postponed and the future date will be told to you. You will not get zero for something that wasn't your fault. cheers.

**110.** Simply put, a system is an organized collection of parts (or subsystems) that are highly integrated to accomplish an overall goal. The system has various inputs, which go through certain processes to produce certain outputs, which together, accomplish the overall desired goal for the system. So a system is usually made up of many smaller systems, or subsystems. For example, an organization is made up of many administrative and management functions, products, services, groups and individuals. If one part of the system is changed, the nature of the overall system is often changed, as well -- by definition then, the system is systemic, meaning relating to, or affecting, the entire system. (This is not to be confused with systematic, which can mean merely that something is methodological. Thus, methodological thinking -- systematic thinking -- does not necessarily mean systems thinking.) Systems thinking is a way of understanding reality that emphasizes the relationships among a system's parts, rather than the parts themselves. We try to study the whole as on contrast to the bits of the whole. For basic understanding, see this website <http://www.pegasus.com/aboutst.html> please use the discussion board in future because other students could use this information as well. hope this helps. cheers.

**111.** Thanks Theron. The second message about systems wasn't for me though!

**112.** hi Theron im just a bit confused as to what exactly my topic entails for the literature review. Im doing "what is a system? System thinking". Which is 1.3! In the text book 1.3 is just about systems in general and what their purpose is...the info is not even a page long! Im not sure if im supposed to be just talking about systems generally or i must be saying what an information system is as well. Also what does systems thinking include? Please can you help me. Thanx very much [student name]

**113.** Hi im confused about my topic. it's A guide on how to use ms word. im not exactly sure what the contents of the essay should be? thank you, [student name]



**114.** the content should be on how to use MS guide....what is MS? it is about Word, Excel, Access etc...you need to discuss some of these and other features.

**115.** hey [Theron] and my group mates we are having a problem doing the histogram they seem very strange they are flat in the horizontal axis, are they real suppose to be like that? what topics should we compare e.g. prices and memory or you can compare anything as long as it's a histogram?

**116.** i would advise price

**117.** ok! thank you.

**118.** Hi. Please tell me how we should work out the PERCENTILE and QUARTILE stuff.

**119.** This example iam giving you below is based on the work you did in the lab on Thursday last week. To calculate the percentile, the pth percentile has p% of the data below it. For example, the median is the 50th percentile. To calculate the price at the 5th percentile you would use the following formula: =percentile (price,0.05). To calculate the price of the first quartile (the 25th Percentile) you would use = quartile(price,1) Hope this helps, Cheers

**120.** hi Theron. [student name] here. thanks for responding to my e-mail. i think this chat room is going to be verxy helpful, eswpecially (especially) for us who are shy to ask the question. i was confused about everything, excel, the quzzes etc. but after reading all the question that have been sent to you through Facebook. just wanted to know where can we find our marks. thank you.

**121.** Hi [student name], thanks a lot. Yah, the chat room does help. I am still processing the marks. i will put them up soon. Cheers.

**122.** hi Theron. i have a questi0n so if we do finish chapter 4 today(i think we on chapter 4) do we, the people assigned to this chapter. do we also have to hand in our litreture (literature) reviews this friday. if not do we had them in on the friday we get back to lectures?

**123.** Hi [student name], If you are assigned chapter 4, you hand in your work when you come back from the holidays. Enjoy your weekend.

**124.** hie I am [student name] and am a first year. What is it that they require from me because i really dont know what I ought to do. I got the topic E-MAIL

**125.** go to the Information Systems group discussion board and read. I have told everyone there what to do.

**126.** PLEASE HELP!! Ive tried to research my topic but I am not sure what parts of it I my review. I honestly donot know what is expected of me. Ive read the handouts and asked around but I am still lost, so please help me.

**127.** Your study guide explains what is expected of you from a literature review. check page 11-13. Your goal is to review/ evaluate/analyse previous and current literature on the topic you have been given. You need to do some research work or investigative work on the topic.discuss the consulted work in order to understand and investigate your topic more. To

explain better, a literature review discusses published information in a particular subject area, and sometimes information in a particular subject area within a certain time period. A literature review can be just a simple summary of the sources, but it usually has an organizational pattern and combines both summary and synthesis. A summary is a recap of the important information of the source. And depending on the situation, the literature review may evaluate the sources and advise the reader on the most pertinent or relevant. You do a literature review through books, journal articles, newspapers, conference proceedings etc....start with the library...its a good place to begin...and its better to use recent readings. in future, use the main discussion board instead of sending personal mails. You can benefit a lot from it.

**128.** hey Theron I'm [student name] from one of your classes I asked you for that Cape Town picture remember?? so please make it a point that you bring it on your flash drive tomorrow at the tutorial, thank you!!!

**129.**Hi [student name] you must learn to write politely otherwise you will not be able to get what you want in future. cheers.

**130.** Please tell me where i can find how to write this lit review. I am still so confused. Do we need to make those tables? Do we need to use books as resources or can we use the Internet?

**131.** Your study guide explains what is expected of you from a literature review. check page 11-13. Your goal is to review/ evaluate/analyse previous and current literature on the topic you have been given. You need to do some research work or investigative work on the topic.discuss the consulted work in order to understand and investigate your topic more. To explain better, a literature review discusses published information in a particular subject area, and sometimes information in a particular subject area within a certain time period. A literature review can be just a simple summary of the sources, but it usually has an organizational pattern and combines both summary and synthesis. A summary is a recap of the important information of the source. And depending on the situation, the literature review may evaluate the sources and advise the reader on the most pertinent or relevant. You do a literature review through books, journal articles, newspapers, conference proceedings etc....start with the library...its a good place to begin...and its better to use recent readings. Hope this helps.

**132.** Hey Theron. do we use the APA refencing system for the LIt Review?  
JUst a bit confused.

**133.** of course, its written in the study guide.

**134.** i dislike my tutor that i have for the lab sessions on a tuesday from 3-4pm. he never helps me he just says look at the answers or go to the hot seat and that is not the point of having a tutor during that period.

**135.** i will address the matter - thanks a lot for notifying me....will sort it out.

**136.** Hey Theron! I really need help with Excel. My student number is [student name] in case you want to send me a reply via e-mail.

**137.** which course is this? INF [course code] or INF [course]?...AND please post to the main wall ...not to my inbox....it could help other students as well.

**138.** It is INF[course code], i`m not familiar with Facebook and i dont know how to post on the main wall but i will get someone to show me how its done.

**139.** Hi [Theron] I am a little concerned with what to study for the exam! Are there going to be any question (questions) about the lectures? Section B is practical and section C is a case study. Are those also multiple choice questions? Regards [student name]

University of Cape Town

## APPENDIX C

### Observation Framework

(Modified version of Carspecken 1996, Gowe 2002)

(a).Classroom contexts

	<b>In rows</b>		<b>In groups</b>
<b>Student seating patterns</b>	Reinforces a transmission approach and limits group interaction		Supports collaborative engagement
	<b>Silence</b>	<b>Louder but engaging</b>	<b>Noisy and messy</b>
<b>Noise levels</b>	Enforces one way transmission of information	Interactive and discursive classrooms with lecturer support	Noisy classroom constrain meaningful lecturer-student interaction
	<b>Educator in front position</b>	<b>Educator shifting positions</b>	<b>Students also taking front positions</b>
<b>Control of classroom space</b>	Front position reinforces the authoritative position of the educator	When lecturer gets in to audience this denotes attempts at negotiating and/ equalising status with the audience	Democratisation of relations when students assume educator's position-demonstration of concepts

(b) Relation of interactants

	<b>Fixed and authoritative</b>	<b>Flexible and collaborative</b>
<b>Lecturer's roles</b>	Transmission of content Providing additional material Directing actions and responses Regulation by rules	Collaborative generation of knowledge Student search for additional material Reflective engagement Discursive interaction

<b>Student roles</b>	Listening Responding to lecturer's questions Elaboration of answers Taking notes	Seeking elaboration Critically engaging with lecturer and peers' questions Peer demonstration of concepts Self reflection Collaborative knowledge construction
<b>Negotiation of roles</b>	Vertical roles are fixed, less negotiable and one way at a time	Roles (lateral and vertical) are flexible, more negotiable, ever changing and dynamic
	<b>Lecturer initiates interaction</b>	<b>Students initiates interaction</b>
<b>Interaction patterns and their meaning</b>	Lecturers initiates interaction through questions, prompt questions prompts, follow up questions	Students initiate interaction through seeking elaboration, follow up questions and clarification
<b>Reference to Facebook</b>	Facebook is mentioned as a space for receiving answers to student questions	Facebook is emphasised as a space for collaborative knowledge generation, peer-based information support and critical thinking

(c). Exercise of power and authority

	<b>Lecturer 's voice is privileged</b>	<b>Student voice dominates</b>	<b>Interaction is transactional</b>
<b>Privileged voice in class</b>	Lecturer's voice dominates and students voices are muted	Multi-voicedness (Engestrom 1987) as students engage and their voices are privileged	Voices of lecture and students are mutually engaged
<b>Social and historical construction of power (Kinchloe and McLaren 1994)</b>	(a) Lecturer has interactive power through authorial claims, enforcement of rules and discipline, and possession of expert	(b) Validity of arguments prized over position of power, Strength and logic of arguments valued	Strength of arguments and knowledge generation is important Relations of power are continuously negotiated

	knowledge	over status	
<b>Forms of control and authority (Gowe 1995)</b>	<p><b>Surveillance:</b> involves supervising, closely observing, watching, threatening to watch, and avoiding being watched.</p> <p><b>Normalisation:</b> Invoking, requiring, setting or conforming to a standard, defining the normal.</p> <p><b>Exclusion:</b> Tracing the limits that will define difference, boundary, zone, defining the pathological.</p> <p><b>Distribution:</b> Dividing into parts, arranging, ranking bodies in space.</p> <p><b>Classification,</b> Differentiating individuals and or/ groups from one another.</p> <p><b>Individualisation:</b> Giving individual character to, specifying an individual</p> <p><b>Totalisation:</b> Giving collective character to, specifying a collectivity/total, will to conform.</p> <p><b>Regulation:</b> Controlling by rule, subject to restrictions, adapt to requirements, act of invoking a rule, including sanction, reward, punishment</p>		
<b>Expression of authority</b>	(a) Lecturer controls classroom activity by rule, and regulations	(b) Students self regulate their activities with lecturer support	(a) and (b) combined
<b>Classroom practices and routines</b>	(a) Lecturer and context define change of subject, speaking turns	(b) Students also define speaking turns, change of subjects	Both lecturer and students define speaking turns and change of subjects

(d) Empowerment and autonomy

	High lecturer dependence	Self empowerment
<b>Student dependence on the lecturer</b>	High level of dependence on the lecturer	Low dependence on the lecturer Students independently engage in tasks
<b>Possibilities for communication</b>	Students passively engage with lecturer	Students actively engage with lecturer and peers
<b>Use of Facebook for student empowerment</b>	Use of Facebook for answering students queries, and transmission of content	Use of Facebook for student knowledge generation, collaborative engagement and critical thinking
<b>Opportunities for</b>	Lecturer instructs, controls and directs student access to	Opportunities for self instruction, self direction, self access to

<b>self regulation</b>	learning resources	materials and individualised instruction (Dickinson 1987)
<b>Demonstration of critical thinking and reflection</b>	Students passively respond to lecturer initiated questions	Students proactively engage with lecturer and peers through intelligent questions they generate and through active reflection

(e) Learning processes

	<b>Lecture control of routines</b>	<b>Context control of routines</b>
Distribution of social routines (Carspecken 1996)	When to ask questions, and who can ask are all determined by the lecturer	Questions are entertained throughout the course of the lecture
Constraints and resources affecting routines	Time constraints per session Overall contact time allocated Students co-operation with the lecturer	
Nature and design of tasks	Tasks are pre-determined They are presented in small chunks by lecturer	Context determine what tasks emerge
Who engages in the tasks	Lectures demonstrates tasks	Students and lecturers are co-participants

## EMPIRICAL EXAMPLE OF APPLICATION (1)

Roles of actors (Carspecken 1996)

	Fixed and authoritative	Flexible and collaborative
<b>Lecturer's roles</b>	<p><i>[Educator's rule is information dissemination]</i></p> <p>[Example: Observation 4  <b>L: Why could there be a need to change from Microsoft excel to databases?</b></p> <p>S: To keep companies afloat (<i>female student notes</i>).</p> <p>L: No. Why would a company need a database? [...] <b>A database is used to protect the company's information..</b>[...].</p>	<p><i>[Posing critical questions and provision of subtle critique]</i></p> <p>[Example: Observation 2:  L: There is a lot of information on legal issues on blogs. The first one is: should bloggers behave like journalists? What do journalists do?</p> <p>Oprah : <b><i>They distort information.</i></b></p> <p>L: <b><i>But the ethics of journalists are not to distort information</i></b> but fair comment, objectivity, verification of sources all those. <b><i>Should bloggers behave like that?.</i></b></p> <p>[</p> <p><i>Collaborative generation of knowledge</i>] [Example: Obs 2</p> <p>L: (<i>Lecturer explains the downsides of use of blogs</i>) So it's possible to be sued for libel if you say horrible things to people [...] or you may be sued for your readers' comments.</p> <p>Olivia: <b><i>For my reader's comments?</i></b></p> <p>L: Absolutely, this is possible.</p> <p>Joe: <b><i>How can one clear himself from that?</i></b></p> <p>L: You make it clear that you are not responsible for these comments and that you are willing to remove comments on request [...].</p> <p>Joe: <b><i>Thus a disclaimer or what?</i></b></p> <p>L: Basically as the owner of the blog, you can actually provide a disclaimer [...].</p>



<p><b>Student roles</b></p>	<p><i>[Listening and responding to lecturer's questions ]</i></p> <p>[Example: Observation 5: L: What is IS? What are we dealing with here?</p> <p>S: (<i>They mumble different things</i>).</p> <p>L: What's seating next to you?</p> <p>S: <b>People.</b></p> <p>L: People (<i>he says it at the same time with the students</i>). What do you need to do with people?</p> <p>S: (<i>Remain silent.</i>)</p> <p>L: Communicate! Thus why we say the most important thing in organisations is communication]</p>	<p><i>[Seeking elaboration and critically engaging with lecturer's questions]</i></p> <p>[Example: Observation 2: L: [...] So the Chinese govt is trying to set a local internet network and keep it insulated from the big internet for the whole world [...].</p> <p><b>S: But don't people have the right to information?</b></p> <p>L: There are ways around any of those restrictions but those ways take a bit of work and knowledge.</p> <p><b>S: Why can't these bloggers do it anonymously?</b></p> <p>L: [...] They want people in their local context to read their blogs so it makes it more likely that their identity will come out.</p> <p><b>Joe: But how?</b></p> <p>L: For example, if you are extremely critical about UCT you may want to be more specific about it so that people inside that institutions notice it [...].</p>
<p><b>Negotiation of roles</b></p>	<p><i>[Lecturers are empowered by hierarchy to supervise and correct tutors]</i></p> <p>[Example: Observation 10 A tutor is assisting two PDS in a lab session. The problem is that the tutor is executing the task himself (punching keyboard keys) instead of giving them directions on task completion. The lecturer comes in and she questions why the tutor is doing it on the students' behalf)</p> <p><b>L: Why are you helping them it's their project?</b></p> <p>Tutor: It's not helping them. I was just demonstrating something?</p>	<p><i>[Vertical decision making is negotiable with compromises given. Lecturers also learn from tutors]</i></p> <p>[Example: Observation 10 Bob: Theron (lecturer) <b>can't we get an extension for the project since we have just started on forms and reports yesterday?</b></p> <p>Tutor: <b>They only started on forms and reports yesterday.</b> (<i>the tutor affirms the student position</i>). <b>They don't have tutoring resources over the weekend. We can't help them beyond now [...]</b></p> <p>L: They can submit on next</p>

	<b>L: You mustn't do it for them. Some of those queries we are going to be tested based on them.</b>	Monday ( <i>the submission date is deferred</i> ). We are going to grant an extension.
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## EMPIRICAL EXAMPLE OF APPLICATION (2)

### Conciliatory negotiation of power (In-class observation example)

Empirical Data	Code	Researcher Comments
<p>Lecturer: <b>I have created these tables in advance for this class</b></p> <p><i>(The class grumbles why she did that).</i></p> <p><i>(The lecturer concedes to the student demands and she redraws the table to show the students how she did it).</i></p>	<p>Defining the normal (normalisation)</p> <p>Grumbling, noise</p> <p>The lecturer gives in to student demands.</p>	<p>The lecturer uses facilitative power to organise content in advance.</p> <p>1. Students use mob psychology to contest power from the lecturer.</p> <p>2. They reflect the classroom as a power contestation space.</p> <p>1. Students successfully negotiate power as they compel the lecturer to redraw the table.</p>
<p><i>(The microphone has some jerks so the sound quality is not very clear. She removes the microphone and pleads with the students to bear with her as she cannot speak loudly.</i></p> <p>Students <b>complain, some jeer at her, they fumble and fuss</b>. Three male students leave the venue [...].</p>	<p>Use of charm</p> <p>Complaining, and jeering amounts to exclusion</p>	<p>1. The plea demonstrates charm (seductive power) but limited bargaining power she has in the face of a large class.</p> <p>2. Students contest the dispositional power of the lecturer.</p>
<p>A female student in the third row <b>raises her hand and poses a question</b>. The lecturer struggles to get her question as the <b>noise level is too high</b>.</p> <p><b>Some students shout shhh to reinforce silence and the noise subsides</b></p>	<p>Raising hands is regulative act</p> <p>Noise</p> <p>Hissing to silence peers has regulative</p>	<p>1. Raising hands is conforming to a rule of academic contact.</p> <p>2. Students use noise to contest power.</p> <p>3. Attention is a resource students contest with the lecturer.</p> <p>4. Students exercise control over other students</p>

	effect.	
<p><i>(The problem of the microphone is finally sougled out by the technician and she claps her hands to signal silence but nobody listens to her. Some male students at the back whistle.) [...]</i></p>	<p>Clapping hands is normalising.</p> <p>Whistling is an open challenge to lecturer commands.</p>	<p>1. Lecturer use gestures to control the class talk.</p> <p>2. Students use mob psychology to wrestle attention from the lecturer</p>
<p><i>(She demonstrates the task – connecting data from two tables).</i></p> <p><b>L:</b> So we want to find a range of values so we are looking for values that are above 9 [...] <i>(A student raises her hand)</i></p> <p><b>L:</b> <i>Sweet heart you have a problem?</i></p>	<p>‘Sweetheart’ is seductive power.</p>	<p>1. The use of the term ‘sweetheart’ is deliberately intended to mask control.</p> <p>2. It is ‘condescension’ (Bourdieu 1991) meant to entrench power by implicit negation of hierarchy.</p>

(Extract of a mainstream class observation transcript of 14/04/08)

## APPENDIX D

### Analysis of interactional power

Based on Fairclough's (1989) CDA

Text (posts)	Description	Interpretation	Explanation
Mandla: <b>hey Theron</b> I'm Mandla from one of your classes.	'Hey' is informal. Lecturer is addressed by first name instead of title.	Use of informal language is expressive and relational. It seeks to portray the student attempt to level relations of power.	Lecturer-student relations online are purportedly symmetrical. Facebook allows students to negotiate power through addressivity.
I asked you for that Cape Town picture remember?? <b>So please make it a point that you bring it on your flesh</b> [flash] drive tomorrow at the tutorial, thank you!!! (IP 128)	'Make it a point' resonates the student interest to impose control.  'you must' is modal auxiliary.	Student manipulates lecturer's promise into an obligation. He impose a directive the lecturer has to honour.  The implicit rule is the	In educational context lecturer-student relations are expected to be hierarchical. The informal nature of Facebook gives give student the leeway to subvert these relations.  The African culture
<b>Administrator's response</b>  Hi Mandla <b>you must</b> learn to write politely otherwise <b>you will not</b> be able to get what you	It is expressive of relational authority of the lecturer.  'will not' is definitive	use of polite language when inquiring from a superior	imposes expectations that the young should treat the old with dignity and respect. In academic contexts lecturers also expect the same from their students.

<p>want in future.</p> <p>Theron (IP 129)</p>			
<p>Naidoo:</p> <p>yes <b>I am so lost in IS</b> I'm not enjoying it at all because I do not understand what is happening. (DBP 46)</p> <p>Administrator's response</p> <p><b>Be specific</b></p> <p>Naidoo...it's the <b>only way I can</b> help you. <b>WHAT</b> are you lost in? which chapter, which concept, etc [...] Theron (DBP 49)</p>	<p>Ignorance puts the student in subservient position-it creates an identity of powerlessness</p> <p>'be specific' is an authorial phrase with imperative connotations.</p> <p>The question 'what are you lost in' has expressive and deliberative significance</p>	<p>Its an explicit norm that students are expected to consult with lecturers on academic issues</p> <p>It has relational significance. Superior agent demands clarity</p> <p>Questions are psychological tools that trigger discourse and shift mental structures</p>	<p>Lecturer has a professional obligation where appropriate, to support and guide students when they are cognitively challenged</p> <p>The lecturer is authorised to define and frame how to assist the student</p> <p>Lecturers are legitimate generators, disseminators assessors of valid knowledge. Use of questions is a social practice that enables this to happen</p>

## APPENDIX E

### Categories developed from lecturer's perceptions of factors affecting their classroom interactions

LEVEL	THEMES AND CODE	CATEGORIES	SUB-CATEGORIES
MICRO LEVEL FACTORS (MLFA)	Student Quality/characteristics (SQ)	Student attitudes	<ol style="list-style-type: none"> <li>1. Motivation for lecture attendance and attention.</li> <li>2. Gender biases for lecturers.</li> <li>3. PDS' perceptions of dominance.</li> <li>4. Informal assessment of lecturers.</li> </ol>
		Student abilities	<ol style="list-style-type: none"> <li>1. Student cognitive development.</li> <li>2. PDS' culture of silence.</li> <li>3. Student successful task performance in labs</li> <li>4. Student academic histories and academic preparedness</li> </ol>
	Lecturer characteristics (LC)	Lecturer persona	Student notions of: <ol style="list-style-type: none"> <li>1. Lecturer's demographic characteristics (race, gender, age)</li> <li>2. Lecturer personality and identity (accessibility, friendliness, addressivity)</li> <li>3. Seniority and embodied authority</li> </ol>
	Classroom factors	Pedagogical factors	<ol style="list-style-type: none"> <li>1. Huge undergraduate Classes.</li> <li>2. Class layout that limits interactivity.</li> <li>3. Student seating patterns reinforce 'separatism.'</li> <li>1. Structure of course and content.</li> <li>2. Instructivist teaching style limits agency</li> <li>3. Teaching technology</li> </ol>

			<ul style="list-style-type: none"> <li>4. Learning style</li> <li>5. Facebook influence</li> </ul>
MESO LEVEL FACTORS (MSFA)	Departmental factors	<p>Nature of the discipline</p> <p>Academic Transformation Office</p> <p>Department Publishing policy</p>	<ul style="list-style-type: none"> <li>1. Male white dominated</li> <li>2. Publishing dominated by whites</li> <li>1. Support from Academic Transformation Office</li> <li>1. 'Aggressive' publishing downplays good teaching</li> </ul>
MACRO LEVEL FACTORS (MLF)	University and Societal factors	<p>University policy on addressivity</p> <p>Perceptions of segregation</p> <p>Apartheid legacy</p>	<ul style="list-style-type: none"> <li>1. Collegial culture abused by untransformed students.</li> <li>1. Elite institutional culture reinforces PDS' prejudice.</li> <li>2. PDS' feeling of lack of belonging.</li> <li>3. Reproduction of high school relations of hierarchy.</li> <li>4. Home backgrounds-racial divide.</li> <li>1. Patriarchal relations embodied in this legacy.</li> <li>2. Skewed resource base in schools.</li> <li>3. Residues of 'institutional racism'</li> <li>4. Historically imposed notions of subordination of other races.</li> </ul>